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THE
FIRST AND CHIEF
CROVNDES OF ARCHITECTVRE
*Ysed in all the auncient and famous
monymentes with a farther &
more ample discourse vpon
the same, than hitherto
hath been set out by
any other.*

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THE CONTENTES OF THIS BOOKE
briefly collected & set out for the helpe of the Reader.



He discourse from time to time howe this science of Architecture hath increased.

Folio.i.

VVhat the office and duetie is, of him that wilbe a perfecte Architekte or maister of buildinges.

Folio.iii.

The first piller that was found out by the Iorians, vpon the simetrie of a strōg man, being .6. times the length of his foote in height, was renewed again by the Tuscaneſ, and of them taketh his name to be called TVSCAN A.

Folio.iii.

The ſecond piller called DORIC Abuided to his perfection in Grece, by Dorus, and of him taketh his name whose height is 7. times his thiknes whiche thiknes is called the diameter.

Folio.vii.

The third piller called Ionica was ſet in the temple of Apollo, and Diana, finished and buildest by the Ionians, whose height is .8. times his thicknes.

Folio.ix.

The fourth piller called Corinthia, found in the citie of Corinthe by Calimachus the excellent Architect, whose height is .9. diameters.

Folio.xi.

The fifth piller named Compoſita or Italica made to his perfection in the time of Vasperian by the auncient Romayneſ, whose height is .10. diameters.

Folio.xviii.

Of a nother auncient piller, neceſſarye to the before named pillers found out to his perfection by the Atbeniens called Atticurga or Atica.

Folio.xvi.

The placing of the five orders, namely, AREOSTYLOS, DIASTYLOS, EVSTYLOS, SISTYLOS, and PICNOSTYLOS.

Folio.xvii.

A rule of Vitruvius geuen for theſe thre pillers, Dorica, Ionica, Corinthia, for the placinge or diſplacing of them one aboue an other.

Folio.xviii.

A rule for the diminifhing of the piller vnder the Capitall.

eodem.

An example to be obſerved for the increafe of the height of Epiftilum

eodem.

Faultes escaped in the printing are thus
to be corected.

In folio ii.line.i.a. for Florence reade Florence.

In folio vii.line.xxxiii b. for Trochitus, reade Trochilus;

In folio xi.line.ii a. for Calimackius, reade Calimacbus;

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TO THE MOST HIGH AND EXCELLENT
Princes Elizabeth, by the grace of God Queene of England,
Fraunce, & Ireland, defendour of the faith. &c.



T is both rightly and excellently affirmed of Marcus Tullius Cicerus in his first booke de officiis (right Excellent Princes & my moste gracious souerayne Lady) that no man is borne into this wolrd for his privat and singuler weale because our Countrie chieslie, partly our parents, & partly our kinsfolke do require as it were a duety of vs, & recompence for that the whiche we haue received: and like as the members of mans body be diuers in number and haue according to their diversitie diuers and peculiare properties so is it in a good and well setteled comen weale: in whiche ther is no office so base or handie worke so simple whiche is not necessary and profitable for the same. And as the members of the body doing without impedimentes their naturall dueties, the whole body is in an helthe ful bermonye, & able to performe all that belongeth to the same. So is it in a publike weale where all men in their calling do labour not onely for their owne gayne, but also for the profit and commodtie of their Countrie. which thinges when I according to my small Capacitie did wryte with my selfe, I was as it were stirred forward to do my duetie vnto this my Countrie wherin I liue and am a member. And so much the rather, for that being servant vnto the Right honorable Duke of Northumberland, 1550. It pleased his grace for my further knowledg to maintaine me in Itali ther to cōser the dōges of yskilful maisters in architectur, & also to view such ancient Monumentes hereof as are yet extant. wherupon at my retourne, presenting his grace with the frutes of my trauailes, it pleased the same to shewe them vnto that noble king Edward the vi. your maiesties most deare brother of famous memorie, whose delectation and pleasure was to se it, and suche like. And hauing the sayde trikes and deuises aswell of sculture & painting as also of Architecture, yet in my keping, I thought it good at this time to set fourth some part of the same for the profit of others, especially touching Architecture: wherm I do followe not onelye the wrytinges of learned men, but also do ground my selfe on my owne experiance and practise, gathered by the sight of y Monumētes in Italie. And because all the members of the body haue chieslie and principally a duetie to the head, as gouernour of the whole, and without which, al the other can not live. So my duety inforseth me most soueraigne lady (the perfect & natural head next vnto God of this our common weale,) to shew a token of the same vnto your highnes, in presenting these my poore and simple labours wherinto I am the rather boldned considering your highnes delight in all kynd of good learning, and perfect skill in the tonges and sciences. Most humble beseeching your roiall maiestie to vouchsafe to let this my small trauaile and woorke passe vnder your noble protection and defence: and I according to my bound and duety shall pray to God for your long life and prosperous Raygne, with peace and tranquilitie to his honour and glorie. Amen.

Your Maiesties most humble
and obedient subiecte.

A.yi

John Shute.

JOHN SHVTE PAINTER AND
Architecle: vnto the Louing and freindy Readers.



Mongest al other thinges (gentel & louing reader) wherwith ȳ deuine prouidence of almighty God hath most liberally and plentifully endewed mankinde: there is nothing eyther for the dignitie and worthines of the thyngē selfe, or for the wonderfull estimation and price whiche in all times it hath bene in more excellent, pretious, and commendable then learnyng knowledge and science, the which alone causeth mortall men to be most like immortall Goddes: and as it taketh out of their mindes that rude and vncomely admiration wherwith through ignorance the simple in most vaine trifles are wonderfully occupied. So to the wise be monumentes and woorkes skilfully practised and carfullie left both commendable & merueilous: yea and suchē, as neither the iniuries of any stormes and tempest can cleane wast and consume no nor (as it semeth) the enuie of man or spoyle of enemies deface & ouerthrow neithir that which is greatest of all, time it selfe can deface or cast out of mynde. And amongest all other studies there is none in my simple iudgement of this sorte that deserueth greater prayse, then that whiche is of the grekes named Architeclonica, and of the latines Architectura (I thinke not altogether ynfit nor vnapt lie by me termed in Englishe, the arte and trade to rayse vp and make excellēnt edifices and buildinges) the whiche like as in all other ages before hath bene in meraelous accountē and estimation, as ful wel appereth by diuers learned Philosophors and famous priuates that imbraced ȳ same, as Plato, Aristotel, Plini, who were excellent therin as their workes will witnesse. Allexander Magnus. Iulius. Cesār, Vespasian, Adrian with many other auncient greckes and Romaines which laboured to aduaunce their name therby who lefte many argumentes of their vertue, hygh intentes and doinges by ȳ same with many other famous, of which Plini maketh mention. Vitruvius and Frontyne, of later dayes men prayse worthy very studious and painfull therin So in vs semeth it not only to craue the wonted commendation, but also to be most necessarie and profitable aswell by the condition of the time as necessarie of the thing it selfe. And surely suchē is the amplitude and largnes (I may well say perfection) of this facultie, that without sum acquaintance with many other artes ye shall not enter into ȳ depe secreces: for it hath a natural societie and as it were by a certaine kinred & affinitie is knit vnto all the Mathematicalles whiche sciences and knowledges are frendes and a maintayner of diuers rationall artes: so that without a meane acquaintance or vnderstanding in thē neyther payners, massons, Gold smythes, embroderers, Caruers, Ioynars, Glassyers, Grauers, in all maner of metalles and diuers others moe can obtaine anye worthy praise at all. Nowe all these being braunches of that forsayd foundatiō, stocke, or science shall bring forth the frutes of it to their great profites, and (ommoditie of the Realme, which cōtinuing and throughlye practised in the same) by time shall increse riches, worshippe, and fame. Considering with my selfe the many-fold commodities and profites that shoulde redownde to a great many louers of the same, and contrary wise what aloſſe and hinderaunce it hath bene to them that lacke the langwages & learning who of necessarie hath remained in ignorance to theyr great loſſe and discomodity of the Realme. Not withstanding I know well there hath bene a multitude and at this time be very many lerned men who hath (through the trauaile received) the ful perfectiō of the prudent ladye

lady Scientia, of whom so depely learned I craue pardon for my rude rashnes that I hauing
but tasted a certaine sweetenes of her excellencie and liberalitie, wherfore naturall loue hath
drawne me to aduaunce her reputation and honour, according to my podre abilitie and good
wil, the thinge nothing garnished as it ought to be, but most briefly and playnelye with such
demonstrations that it might edifie them which of a long time haue desired and reached at it
to attaine Also for the encoraging of those which ernestly studied and fauored it. I thought it
therfore good to sette out and commit to writing in our native language, parte of those thin-
ges whiche(both by great labour and trauaile at the first for my priuat commoditie I searched
out and for my owne pleasure out of diuers aswell latin ana Italian, as french and dowche wri-
ters) I haue diligently gathered. As also passed many countries and regions to see, both in Rome
amongest the antiquities and in the most notable places of Italie, where are most excellent buil-
dinges, and intending to write of Architecture or buildinges: I thought it best neither with
the lightest or least profitable parte therof to beginne, nor al togithir after the moste slender
sorte to handell that which I purposed to intreate vpon. I haue therfore taken my first ente-
raunce into the writing of this arte, at the fine antique pillers or Columnes, commonly named
of the places and persones partly where and of whom they were inuented, and partly of their
vertues & properties of those that they wer likned vnto, which pillers names are these as fol-
loweth. Tuscana, Dorica, Ionica, Corinthia, Cōposita; The treatise of these pillers, as it bath
in it most delectation and pleasure in the beautie and comlines of the workmanship appertay-
ning vnto them. so though at the beginning, it be mingled with a littell asperitie and as it were
bitternes (for the difficultie and hardnes wherwith as both principalles and also other thin-
ges of any excellencye at the first are coustomed to be, it is somewhat Comberous) yet it is both
so necessary and profitable, that neither without it any man may attaine to any estimable pirt
of the reste of this science, and with it as by a klew of thred or plaine path way a man may most
easely pearse and lightlye pasouer the most darke & vñknownen corners of the whole proceſſe
therof. But to speake of the wretchednes of this parte of Architecture: it semeth almost al togithir
superfluous, wherfore taking these to suffice in the part to be sayde, I will now shew what
trade and order I do followe in the declaration of the measures, proportions, and garnishmen-
tes of these before mencioned pillers. For so much therfore as in teaching of all artes thre thin-
ges are chiefly to be considere d that is to say diligence in geuing y preceptes, aptnes in chosyng
plaine and evidente examples, and last of all practise and experience of the teacher. I haue for
the first parte taken for my author chieflye to be followed the noble and excellent writer Vi-
truvius one of the most parfaictest of all the Antiques, and for that, neither any one man in
what arte so euer it be is absolute, and that other singuler men of the Antiques and he in many
poinctes do disagre and differ (which Sebastianus Serlius a meruclous conning artificer in our
time in many places of his workes learnedly doth declare. I haue added vnto him vpon what
soever in any thing seemed nedfull the opinion and meaning of the sayde experte writer Seba-
stianus, here and there also wher I thought meete I haue ioyned the minde and iudgement of
one Gulielmus Philander a notable man whiche about the yere of oure lorde. 1546. wrote
vnto the frenche king Anotacionis vpon Vitruvius, concerning this matter or suche like. Now
for examples which are necessarily required to the opening of such darke matters, I haue eue-
rywhere through the whole proceſſe of this present treatise after the preceptes to the light-
A iy: ning

ning of them sett both demoultion and figure, and as for praelise and experiance of these
thinges whiche I teache, I assure the moste gentle reader and all other that shalbe readers so
this my littel worke that I haue put no title in any part therof cōcerning y proportion & simetry
to vse the accustomed terme of the arte of the fornained columbes, whiche I haue not as well
seen and measured in Italie, from whence they cam first vnto vs amongst the Antike woorkes
as read and studied in England in the Antentique writers, that I might with so muche
more perfection write of them as both the reading of the thinge and seinge it in dede is more
then onely bare reding of it. This small and simple treatise of myne I can not tell whither with
like felicitie brought to his perfection as with no small laboure and studie for this time ended, I
thought meete as the firste frutes of my poore attemptes & indeuors to leue as a duetye
and dette of me to be payde, and that well received of all men, I shall thinke my selfe
most happye and if not of all personnes, yet at the least wise of such as be honest
estemers and accepters of other mennes diligence and studies. The which if it
come to passe, both I shalbe glad of my laboures in these thinges be-
stowed and for the loue of my naturall Countrimen be further
more encouraged hereafter to attempte greater thin-
ges. Thus almighty God preserue the
in godly excercices to his pleasure
for euer Amen.

C The discourse from time, to

TIME HOWVE THIS SCIENCE

of Architecture increased.



N the beginning of the world, Nature by necessitie dyd firste invent straunge maner of couertures or houses for the people to inhabyte in. But of all suche order and forme of buyldinges as were before Noes fludde, it shall not nede to make rehersall. But after the fludde of Noe, the people agayne, when they were increased and multiplid, did daylye more and more, seeke for theyr commoditie to be defended from the heate of the Sunne, and coldenesse of the ayer: some succoured thē selues vnder the shadowe of trees, and other taking occasion thereby, deuised to set vp forked stakes, with the forkes vp wardes, and therz vpon layed boves. After wardes they still deuised and daylye did practise more and more in that kinde. And in time, they perceyuing the vse of cutting wth byron, did set vpright trees as they had before, wth theyr stakes being done wth their handes, and because tbey shold not cleave wth the beauines of theyr burdens aboue at the toppe, they compassed them about wth ringes of Iron, and called them Pillers or Columnes. The forme and shape of which Pillers, they did imitate, fashioning them of stone. And then they callynge to theyr remembraunce the fludde of Noe, which had drowned all the world, deuised to build the towre of Babilon. So they added in steede of the rynge aboue at the toppe of their pillers, these, whch our author Vitruvius calleth Astragali, and Apophigis. So in proces of time, diuers witty men euer addinge some thinge thereto, at the last it came to some perfection. Then did they beginne to deuise and practise after dyuers fashions, and buylded a great parte of the tower. In whch buylding came the devision of tounges, or languages, whereby these buylders were parced and scattered abrode vpon the face of the earth, and inhabited many straunge countreyes, and began to buylde in Egipte, and after that in many other places, as Semeth by the workes, whch Belus, Ninus, and Semiramis buylded, whch were spred so farre, as som men do suppose that Trier in lowe Doutcheland shold haue bene buylded of the brother of Ninus as ye may perceyue by Berossus, Herodotus, and many other that are writers and witnesses of the same. Iea, shortly after was made Memphis, the whiche nowe is named Alkayre, the whiche was buylded by a kinge of Egipte, hauing in compasse round about, one hundred and fiftie stades; or as some interpretate it, so many furlonges, and in like maner the aunciet citie of Thebes in Grece, besides many other cities, whch were made before and after. In the which it is to be supposed, that there were sumptuous temples and Pallaces. So, that they were experte and began in that science to come to more perfection. And immediately after a wittie man named Dorus (the sonne of Helemer and Optix the Nymph) numented and made the firste piller drawnen to perfection, and called it Dorica, after his owne name. Shortlye after him, there was Ion, sonne of Xuthus, that was made governour of a part of Caria, which he had wonne, he in that countrey buylded these cities folowing, Priem, Samum, Teorem, Colophonem, Nachiu, Eritren, Phocean, Clazomenas, Lebedum, Melyten, of the which, the citizens afterwardes draue out of that countrey the Caryans, and called it Ionia, after theyr kinges name, and then they made their churches and Temples of their Goddes, and first began with Appollo his Tem-

The chiefe Groundes

ple, as they had sene it in Grecia before. And they not knowing any measure of pillours conſidered bowe to make a iuft Symetrie, that it might be comely and also stronge, toke their meſure by the foote of a ſtronge fashioned manne, findinge him to be in height ſixte times, the length of hys foote, and ſo by that meſure finished all the partes of that pillar, and called it Dorica, becauſe they hadde ſene it in the workes of Dorus, and ſo therewith finished the temple of Appollo, after that they deuized to make a temple to the goddeſſe Diana, wherein they dyd deuize an other Symetrie, for that temple, as they hadde done for the temple of Appollo, and fashioned it after the iuste meaſure of a woman, to the ende and purpoſe it ſhoule be more beautiſfull and ſklen더, making it eighthe Diameters, in height, and called it Ionica, after their countrey, adding therunto in the ſtead of her ſhoowe, that which Vitruuius, nameſt Spira, and in the Capitel, was ſet Voluta, in the ſteade of her heare, whiche truſſed vp with a lace, on eyther ſide of her heade, for an ornatuer and garniſhment of the Capitell. They alſo fashioned the body of the pillour, and filled it with Canalicoli, and Striges, as thoughe it were the plates of her garmentes. Then they being more delighted with the beautiſhnes of the height thereof added alſo an other Diameter, vnto the forſaid Dorica, and made it ſeven Diameters, in height. After that in the citie of Corinthe, was buried a certaine maidew, after whose burial her nouriſhe (who lamented much her death) knowing her delights to haue bene in pretye cuppes and ſuſche like conceytes in her life time, with many other proper thinges appertayninge onely to the pleasure of the eye, toke them, and brake them, and put them into a littell preatie baskette, and did ſette the basket on her graue, and couered the basket with a ſquare pauinge ſtone. That done, with weping teares ſhe ſayde Let pleasure go wyth pleasure, and ſo the nouriſhe departed. It chaunced that the basket was ſet vpon a certain roote of an herbe called Acanthus, in frenche Branckurſine, or bearefote with vs, now in the ſpring time of the yere, when every roote ſpreadeth fourth his leaues, in the encreaſing they did ronne vp by the ſides of the basket, vntill they coulde ryſe no higher for the ſtone, that couered the basket, whiche being ſquare and caſtinge hys fourre corners ouer the tydes of the rounde basket, constrained the braunches of the herbe to draw downwardes againe with a ſertaine compaſſe, and ſo grewe to the fashion that Vitruuius calleth Voluta. So is there alſo other ſmaller that come oute of the Caules, and ſtakles, and are named in greeke Helices, and the basket beyng hydden vnderneath wyth a multitude of leaues. In thys citie one Calimachus, an excellent Architectur, paſſyng or goinge thereby, regardinge the beautiſhneſſe of nature, afterwardes uſing then the meaſures of the forſayde Pillours, makynge the pillour Ionycke, vpon the whiche pillor or Scapus thereof, he ſet the Capitell, the whiche he hadde ſene vpon the tombe of the mayden, the whiche garniſhed beatifullly the whole pillor, whiche Capitell, was in height the thicknes of the pillor, and named it Corinthia, because it was made in the citie of Corinthe, by thandes of Calimachus, who for the excellence of that arte was na- med Cataſtechnos, and after that this worke growing more and more to perfection came to the Romaynes, and ſo through oute all Italie, and manye other places, yea, and was througbyle practiſed by them. Then the Tufcaneſ, beginning to builde, hauiing knowlaige of the pillor, whiche was firſte inueneted by the Ionians, vpon the Symetrie, of a ſtrong manne inueneted to buylde ſtronglye after the maner aforsayde, yea, and to garniſhe alſo theyr ctyies and townes beatifullye with a pillour of their owne deuize whyche yet at

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this present time, remayneth wholle in the eitie of Forence and in the countreis there about they fourmed and fashioned that pilla, whyche to thys daye is named after the sayde countrey Tuscana. The Romans, then wel practised in their measures of all the rest of their Columes, and also desirous to encreace so noble an arte, by some noble accession, beholding and regardinge the beautifulnes of these foresyd pillors, that is to say. Tuscana, Dorica, Ionica, Corinthia, gathered oute of eche of the same pillors, that, whyche they thought moste faire, and made a piller of pleasure or triumphe, after the moste excellent maner that euer was before. This piller was firste buylded to his perfection in the time of Titus, Vespasianus, who sette it at hys triumphe in the higheste place of hys arche triumphall, and called it Composita, or as some doo name her Italica. These pillors, partelye for their beautye and comlines, partelye for their fortitude and strength, the writers of them, haue resembled and lykned to certain feyned Goddes and Goddesses. As namely Tuscana, is applied vnto Atlas, the kyngē of Mauritania; Dorica, vnto Hercules and the god Mars; Ionica to Diana, or Appollo. Corinthia vnto Vesta or some lyke Virgin, and Composita, to Pandora, of Hesiodus, the which he faineth to haue ben endewed wyth diuers of those graces and coninge, wherwith the beforenamed Goddes and Goddesses were endewed, so that it semeth by the auncient writers and Authors, which haue made rehersall of these thinges, that they haue bene had in great estimation and prisē, as ye maye wel parceyue by Iſis, whiche buylded a temple in Egipte for her father Jupiter, lycause her husbande Osiris, and she were in great estimation, and also for theyr beautifull iuuenlions and wyesdome, were honored as goddes. This maye well be gathered by their pillors and ornamenteſ, that belong therunto, the whyche were noted and markeſ with Hebrewe letters, and also by the Sepulcres of Amasis, whiche was made more, then M. D yeres before the birthe of Christe, in the whiche one of the Pyramides was CCLx. thouſande mens workeſ, the ſpace of twentye yeares, the whyche remayneth in Egipte to be ſene at this preſent daye, and manye other beautifull buildingeſ of that nacion. Reade. Drado. Sic. li. 1. 2. Also it semeth by many other writers, that after Babell decaideſ, incontinently the Hebrues moſt triumphantlye flouriſhed in thys pointe. Thus we maye perceiue that the Hebrues receyued their knowlage of the Babilonians, and the Grekes, receiued it of the Hebrues, in lyke caſe the Latines, and the Italiāns receivede theirs from the Grekes, the whyche our Author Vitruuius, doth not deny, in makynge demonſtrations to a Latine worke with Greke letters as vpon the inuention of the Grekes, whiche concerneſ hys ſcience in Architectura, in the whyche thing Vitruuius, ſemeth muſe to be comended, as one, that did not disdayne to acknowledg the authors and writers, out of whom he receiued his knowledge. In ſo muſe, as in hys ſeuente booke of Architecture, he affirmeſ (by naming the notableſt of the) that they which haue lefte theſe thinges in wryting, are to be commended, whose names alſo I thought not altogether the meteſt to be omitted, & therfore do rehers theſe. Theodorus, which wrot of the Dorica. Etesiphon and Metageues, who wrote of the Ionica, which was ſet in the teple of Diana, at Ephesis. The Hermogenes, hath writte of Diana in Magnesia, after Argelius, which made the rehersal of the Corinthes. Fiftly Sathirus, & Piotheus, who did ſpeake of Maſolea, in Halicarnasso, laſt both Cares, Briaxes, Scopas, Praxiteles & many other, as Nexaria, Theofides, Philemon, Demophilos, Pollis, Leonides, Silamon, Melapus, Sarnacus, Euphranor, al the which verly, are to be thanked & comended thoroughly

The chiefe Groundes

For by them we know and perceiue (as though we sawe in a loking glasse) the thinges, that haue bene done and made long before. Neuertheles, it hath ben withdrawen and hidden (as almost al other knowlages, for a long season hath bene) through ignoraunce, for so it came to passe by the iniurie of time, that all sciences and learning haue bene kept secret and not spaken of, in so much that at this daye, there are many which name this order of building to be of the new facion. But it can not be new, that hath so many ancient Authors and maisters thereof, whom namely the Noble writer or Author Pliny, hath in so great estimation, that for their sake he blameth al them greatly, that haue written and wrought any thing, and haue not named the authors and maisters, of whom they take their inuention especially of suche great and vnspeakable worke, of which the honour and fame, hath bene as much vnto the maker ther of, as it was vnto them that caused those thinges to be made. But now of thie thinges we haue spoken ynough, let vs therfore speake some what of the worthynes of this science, and of the office of an Architect.

VVhat the Office and Ductie is of him that vvyll be a
Perfekte Architecte or Mayster of buyldings.



Architectur (by the common consent of many notable men) as Cesarius sayth, ys of all artes, the most noble and excellent, Contayning in it sundrie sciences and knowlaiges wherwyth it is furnished and adourned, as full well Vitruuius doth affirme and declare by his writinge. For saith he, an Architecte must be sharpe of vnderstandinge and both quicke and apte to conceiue the trewe Instructions and meaninges of them that haue written therof: and must also be a perfect distributor of the great misteries, that he hath perceued and experymeted, that playnlye, and briefly he maye discusse and open demonstrations of that which shalbe done or mete to those persones, that shalbe the fownders of any noble workes. wherfore he ought first to be a very good Gramarian, then to haue experte knowladg in drawing and protracting the thinge, which he hath conceyued. Nexte he must haue a good sight in Geometrie, Consequenty in Opticke and in suche lyke sciences he must haue good perceuerance. Likewise in Arithmeticke he must be very parfaict, and in histories singulerly well seene. He must also haue a good sighte in Musycke, and some knowlaige in Phisiche, not altogether ignoraunt in Astronomie, he must also besides all thise ben Philosophie, very experte. The causes why al thise sciences before named, ought to be in him that is a parfaict Architect and maister of buildinges be of Vitruuius in this sorte rehersed. If he haue (saith he) learninge he shall strengthen his memory with all written booke, and throughe drawing vtter his fantasie and shewe the trike or fassion of the thing that he goeth about to make. And Geometrie teacheth vs the order of rules, Compasses, Squiers, Quadran-tes, and Iuste waterleueles with manie other knowlaiges that procedeth thercof as Euclide, and other authours & also Sebastian Serli, in his first Chapiter reherseth, Opticke sheweth vs howe and by what meanes the lightes shold be set into the House, And howe they shold be brought from place to place, as to serue the hole house, and cuery place therin, whiche Optica, is properly called perspetiue, and is of a furder speculacion, then therin can or nedeth to be exprest: whiche of Sebastian Serlius in his second booke first second and thirde Chapiter is partly

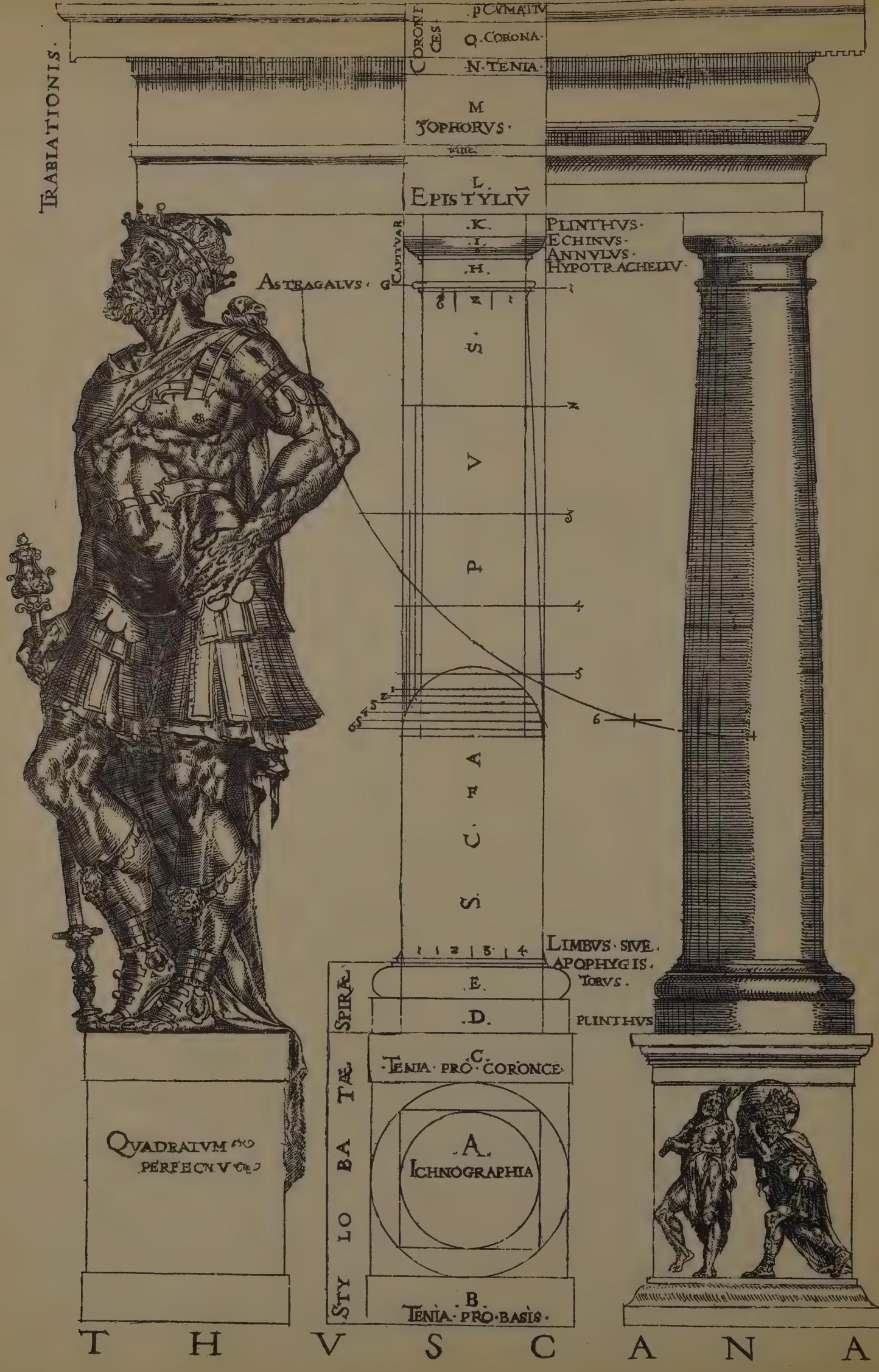
Of Architecture.

partely declared. Arithmeticke, teacheth vs innumerable pointes most necessarily required to the parfaicte knowlaige of this art, for without yt, we can neither know or yet discusse the measures and harde sentences or questions of Symetrie, neither howe to accompte the Coste and charges of our labores. An Architec^te also must haue a knowlaige in hystories, There be moreouer multitude of causes in buildinges, and verymany ornatures and garnishinges of which he must nedes geue answere, from whence they come, and for what purpose they are made, As for an example, If a maister workman shoulde make ymages, figured like women, clothed and garnished after a beautifull soarte, which are nanied Cariatides, and set them in his worke for pillers and make ouer their heade Mutilos, and Coronas, yf yt were demaunded of him to what purpose those ymages wer made, then he shuld answer that Caria, a towne in Peloponeso, trayterously conspired with the Persians, against the Grekes: But the grekes getting the victorie ouer their enemies, agreed with one accord, and besieged Caria, and wan the citie, killed the men and toke the women, carieng them as bond women not suffering them to put of their Ryche ornamentes and Iewelles to the intent, that the shewe of their triumphe, myght be thereby the more glorious. So they subdued, weare brought into bondage. For this cause and other suche lyke, the chief maisters of Architecture made in their common places and pallaces suche women to beare vp the burthen of their buildinges, the whiche was a remembraunce and memorial of their punishmentes for their mallice against the Grekes, sustainted by the Cariatides, that is to saye, by the women of Caria. In lyke case dyd the Lacedemonians, whan they with so littell a power overcame suche a great host of the Percians, and slew them. After which conquest in their triumphe, they builded a gallery whiche shoulde remayne vnto them for a perpetuall and euerlasting token of victorie and did set therin the figures, and counterfeites of the Percians, which before wer their prisoners, in their straung apparaill, standing in their pallaces, supporting their galleries, wherfore they were feared of their enemyes therby, and also yet encouraged the hartes of the Citizens, against their other enemies and backe fren-des. Vpon this example Pausanas, did afterward make the counterfeates of the same Persias, and vpon their heddes, he laide Epistilia, and Coronas, setting betwixt them Zophorus, the whiche was garnished and figured with the Iewelles, that they had taken from them being their enemyes, As Cuppes, gebletes, cheines, girdelles, & suche lyke other Iewelles, which wer plentifull among the Persians, and vnder their fete was set Stylobata, wherin were written their titles, Many suche Histories an Architec^te, ought of necessitye to know. Next vnto this doth follow Musick, which also is verie necessary for an Architec^te, for these causes must he haue, as it were a foresight in it, that therby the principall chambers of the house, shuld with suche order be made, that the voice or noyse of musicall Instrumentes, shoulde haue their perfect Echo, resounding pleasantly to the eares of those that shalbe heares therof, as also the Romanes, vsed in all their pallaces & for many other necessities therunto belonging, of the which Vitruuius, maketh further demonstration, as the refreshing of the Melancolickē mindes, which ar alwaies trauailing for further knowlaige. But now consequently followeth the cause why he should haue sight in Phisicke, which through the knowlege of Astronomie, parfaictly doth declare the mouings of the beauens, and where vnto by their naturall inclinations they be disposed, as also the understanding of the plages or Coastes of the word, which the Grekes call Climata, to thyntent that he maye shewe what ground plottes stande in the most holsom ayer to bulde vpon. And which also be the swet and holsome waters, the mooste fertill and frutefull places,

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places as namely for those plottes that stand contrary to thys order are not mete or necessarie to build vpon. This holosome ground so found wheron ye shall build, yemust furst haue knowlaige how to cast your ground plotte, wherin you must deuide all your seuerall places of offices apartayning to the furniture of your house, your principall chambers of rest and libraries, and such other like must receyue their lightes from the East, for that the sonne by natural heate at his rising draweth to him all corrupte humors and euill vapors of the earth and quickneth the spirites of man and beast, and if ye will cast therin baynes or hot houses, with winter Chā bers and parlors they shal receive light from the west. For that side is defendid from the south windes which are greuous and contagious and also great wasters of all kinde of buildinges, as may welbe parceuyd by old Edifices. Your study places, were you wold write, draw or deuise, or the places wher your Sellers shuld be cast, ought to receive their light from the northe, by cause in that parte are the lights, which are stedfast. As for lights other wayes appointed I referre to the builders of those works. But Vitruuius, maketh no further mention therof. Now also it belongeth to an Architecē, to haue the knowlaige of Astronomie, wherby he shoulld directly know the foure principal places, which are East, west, north, and south with that, whiche they call Equinoctium, and Solsticium, and the mouings of the sterres, for without this knowlaige none can attaine vnto the making of horologes, quadrantes, Clock es dialles, in the sonne necessary to be set in goodly Edificies. It belongeth also to an Architecē, to haue sight in Philosopbie, which teaching to be of a nable courage as Vitruuius saith, and also gentil, curiosius, faithfull and modest, not geuen to auarice and filthy lucre, as not to be troubled or corrupted with rewardes or giftes, but with grauitie and Sagenes to cōceive al bon or and dignity in al things conseruinge his good name and estimation. Let him also take a charge of workes in hand, being desired and not desirous of workes. He, which wold be an expert Architecē, ought to haue all these sciencies and knowlaiges, To him that hath any science or knowlaige and iudgment therewith conceiued, it is most evident and plaine. Neuerthelesse it will sound straungely to some that a man shoulde learne so many sciencies for the atteining of one, and kepe all them in memorie for the practise of the same: yet it is necessary and also mete, that although he be not parfaict in them or euery of them, yet he shoulde haue some knowlaig in them and so it behoueth, neither it is requisit that he shoulde be so parfaict a Gramariā, as was Aristarchus, and yet not altogether with out it. Nor in Musick like vnto Aristoxenis, neither in paintinglike Apelles nor Plastes, or Stattuary like vnto Miron or Policrates, neither in Phisike like to Hippocrates, but yet in this and other not altogether ignoraunt. But yf a man myght be parfaict in al these sciēces as were Aristarchus, Samrius, Plulolaus, Architas, Tarentinus, Apollonius, Pergeus, Eratosthenes, Sireneus, Archimedes, Scopinas, (for all these were strāgely weapaned with al these sciēces before rehersed) he shoulde be able to answer to all questiones therto a- pertaining. But I may pray as Vitruuius doth, saying, I pray O Caesar, and all other that rede this my writings, if ther be any thing disagreeing to any of these sciencies beare with me for I cōfesse myselfe (saith he) not to be parfaict in any of the other sciencies. But he nameth him selfe to be an Architecē, wherein he thinketh him selfe parfaict, But I the settler forth of this trea- tise in Englishe, acknolage myselfe not to be a parfaict Architecē (as he saith) nor yet Grama- riā, & though I haue put my selfe in prease, it is not through the depe knowlaige aboue reher- sed, but I do it for to put in vre an entraūce or beginning to them which be therin Ignoraunt, & desyre further knowledge in these thinges, as hereafter appereth by the declaracion hereof.

TRABIA TIONIS.



Of Architecture.

TVSCAN.A.

THe maner and forme of the ffe principall pillors, and their proper names with all
their compoundes thereto belonging and, their setting in their iust places by the order
and rule of Symetria, and marked with the letters A.B.C. wherunto is made
this piller Tuscan, as it is figured, inuented and made by the Ionians,
vpon the Simetrie of a strong man. Renewed and
found agayne by the Tuscane and of
them taketh his name.

Volio. iiiii

20 THVSCANA,

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T V S C A N A.

THis pillor is the strōgest and most able to beare the greatest of burtē of al the others. And that same his strēgthe cometh by his shortenes, therfore he is likē ned vnto Atlas, kynge of Maurytania, and the pillor is named Tuscana, whose heyth must be with the Basis and Capitall. 6. times his thicknes in heighth. But if yow will set Stylobata, or Pedestate, vnder the pillor, Then shall ye begyne from the grounde vpwarde, euен after thys sorte. Ye shall make a foure square stone, like vnto a dye. The quantity of the square as great as ye wil, according to your purpose. Or ye maye drawe a ground plot on a table, In that square ye shall make a round compasse, so great as yt may be within that square, and then within that compas make an other square, and then within that square, make ye an other compas the which compas shal be the iuste thicknes of your pillor. The which Vitruuius calleth the Diameter, and then shall your vttermost compas be for the proiecture, or saylling out or hanging ouer of the foote of the pillor which Proiecture, the Grekes do name or cal it Ecphoron. Now the foote of the pyllor, whiche is named Basis, or Base, whiche Base, strecheth out to the vttermost compas, and the square without that compasse is the iust bredth of the Pedestal, which is marked with A. That bredth or heyth of that square deuide you into 4. partes. Geue Tenia vnder maked with B. so muche as one of these partes, for his iust heyth also. Tenia, aboue marked with C. asmuch to his heyth: This donne, the Pedestalle, is 6. suche partes in his hole heyth, like vnto the pillor, whiche is 6. Diameters in heighth as is before mencioned, the which measures be plainly shewed in the middell pillor, which is your grounde plotte, wherin is found the height, bredth and thicknes and also the proiectures of the holle worke. Thus I conclude an end of the Pedestale, with his measures.

BASIS or SPIRA.

Now vpon the Pedestale, which is marked with A. you shal set your Base, or foote of the pillour being in height half the thicknes of the pillor, and that heigthe ye shal deuide into 2. partes. Geue one part vnto Plinthus which ought to be rounde, and is marked with this letter D. The second parte geue vnto the heigthe of Torus, marked with E. with his Apophigis, whiche Vitruuius calleth Limbus. This Proiecture of this Base, shall stande out on either side of the pillor, so much as the one compas is greater then the other, as is before rehersed in making of the grounde plotte in the Pedestalle.

SCAPVS. or COLVMNA.

SOn the foote of the pillor, directly & upright set Scapus, whose macke is F. the which Scapus, is the boddy of the pillor, and is 5. Diameters in height, that is to say 5. times his thicknes in height. The which thicknes vnder at the lowest parte of Scapus, you shall deuide into 4. partes, wherof at the head of the Scapus, shalbe 3. So shall the pillor vnder the Capitall, be deminished the fourth parte: wher as al the other pillors are dyminished the sixte part. For the which pillor I haue found or inuented an other way in the dyminishing of it,

ofit, than is declared for the diminishing of other pillors, the whiche hereafter followeth. Deuide the height of Scapus, into 3. partes. Vpon the lower parte standing on the Base, make halfe a compas, as greate as you maye, being within the thicknes of the pillor. Then draw downe right the thicknes of the pillor vnder the Capitall downe wardes vppon the third parte of the height of Scapus, wherupon was made the halfe compas. Then shall those 2. lynes make 2. crosses vppon eche side of the half compas, one crosse. Then measure from the crosse downe wardes euен by the side of the half compas, vnto the strike vnder the halfe compasse, and deuide it into 6. lynes ouerthwarte the halfe compas and marke them also with. 1. 2. 3. 4. 5. 6. as you maye plainly see in your ground plotte. That done, take a payre of compasses and sette the one foote of the compas in the middell of the pillor, vnder the Capitall, and the other pointe of the compas ye shall bringe downewardes vntill ye come to the pricke, wher the halfe compas was made with, lette that pointe of the compas vnder the Capitall stande, and with the other pointe of the compas, drawe vp wardes compassing from the thirde parte of the pillor vnto the heigthe of the pillor, that the one parte of the compas be iuste as high as the other. Then haue ye made the rownde side or your quadrant: The whiche lyne so drawin shalbe deuided into 6. partes: whiche partes ye shall drawe ouerthwart the pillor, and marke them also from the Capitall, downewardes with. 1. 2. 3. 4. 5. 6. Then shall ye beginne after this manner and drawe from the end of the strike within the half compas, the which is marked with 2. vppwarde vnto the strike aboue marked 2. to the lyne aboue drawnen ouerthwarte the pillor, and also from the strike. 3. drawe vppward vnto the strike aboue marked with 3. and so from. 4. to. 4. and from. 5. to. 5. and also frō. 6. to. 6. The whiche lines leade downewardes perpendicularly. Then shall ye close vp the side of the pillor, as I haue closed the one side and left the other ope that you maye see it and understandit the better. Then take a rule and drawe from the smalest of the pillor, vnder the Capitall, drawing downewardes to the line. 2. the whiche is drawnen ouerthwarte the pillor and so drawe from 2. downewardes vnto 3. and also from 3. to 4. from 4. to 5. frō. 5. to. 6. So haue you diminished iuste the 2. third parts of the heigthe of Scapus. I say not that you shoulde vsse iustly no more but these 6. lines vnto the diminishing of this pillor and these other pillors following. I do but shewe you by this briefnes the playne and true waye: by the whiche waye notwithstanding ye may occupie so many lynes as shalbe nedfull. The mooin number, the parfaicter shall the diminishing be. Nowe at the toppe of Scapus, you shall make Astragalus and Apophygis, marked with G. and shalbe high the sixte parte of the Modulus, that is the twelfth part of the Diameter. That part you shal deuide into 3. partes, wheroft geue the 2. highest partes to Astragalus, and the third vnto his Apophygis, also byneth at the foote of Scapus, ther is a square edge or Apophygis inferior being in height so muche as the height of Astragalus, that standeth at the top of Scapus, their projectures be like vnto their heigthes.

Capitall or CAPITVL I.

 Pon the body or toppe of the pillor, the hedde or Capituli shalbe set, being in height one Modulus, that is to say halfe a Dyameter, that height you shall deuide into 3. partes, geue the one parte to Hypotrachelium, marked with H. The second partie ye shal deuide into 4. partes. Thre of thē ye shal geue to Echinus, marked with I. the fourth part geue to Annulus, also that partie which remaineth geue to Plinthus which is the highest partie,

C.i.

whose

The chiefe Groundes

whose marke is K the Projecture or hāging ouer shalbe so muche as the pillor is diminished on eche side þe which is correspondent to the thicknes of Scapus beneth. Thus writeth Sebastian Serlius of the projecture of this Capitall. Neuertheles I haue sene in some places in Italie that the Projecture haue bene like to their height, by cause the pillor is so muche dyminished. it should be therefore the more comely to haue the greater Projecture, and yet shall those two wayes not differ muche one from the other. But yet of these two wayes let vs take the moste faire. I haue also sene this pillor so placed that it hath bene. 7 Dyameters in heigthe, where as he supported no other psllors but his owne Trabiacions. So endeth the forme and measures of the Capitulum.

EPISTILIVM.

Vpon the Capitall shalbe layde or set Epistilium named also Trabes called in oure English tonge the Architraue þe which is marked with L and is a modulus in height. The which height ye shal deuide into 6. parts wheroft Tenia, to be the sixte part, & the other 5 partes is for Trabs. So done: vppō the Epistilium you shal set Zophorus being also a Modulus in height and is marked with M. vppon Zophorus, shalbe set Coronix being in height also a Modulus, & that height you shall deuid into 4. partes. geue one part vnto Cimatiū vnder Corona marked with N. but the other side of it is called Tenia, and geue likwise 2 parte: vnto Coronamarked w O. & the fourth part which remaineth, geue vnto Cymatiū ouer Corona which is marked w P. In Corona, ye shal make Denticulos, the which are made like teethe and their Projectors shalbe like vnto their heightes, sauing only Corona which hangeth his height and halfe his height ouer. And thus endeth the mesures of the pillor called Tuscan. Now ye shal understand, that the pillor which standeth in the myddell is your ground plotte, but the other whiche standeth by him, is made vpon the self same measure but that it is otherwise garnished. whiche garnishmentes bring other measures for them. And as touching this pillor, I shall begin from the lowest parte of the Pedestall being Tenia inferior, deuiding his height into 8. partes. Geue 3. partes vnto Plinthus & 4. partes geue also to Sima reuersa, and the eighte parte remaineth for the small edge vpon Sima. vpon the whiche is sette the boode of the Pedestale, also the upper Tenia ye shall deuide his height into 5. partes geue 2. partes vnto Hypotrachelium, and also 2. partes vnto Cymatium, and the fifte part geue vnto his edge at the toppe of the Pedestale, nowe Basis, or Base, belonging to the sayde pillor is the height of a Modulus, or halfe the thicknes of the pillor, whose height ye shall deuide into 2. partes. Geue Plinthus one parte, and the second part deuide you into 3. partes Geue 2. partes vnto Torus, and the third part deuide also into 3. partes. Geue 2. partes to Sima and the third parte ye shall geue the edge vnder Sima. So endeth the mesures of the Basis or Base, vpon the whiche Base shalbe set Scapus, or the body of the pillor, made after the maner & order as before is mentioned vpo the whiche shalbe set the Capital the one Capital is like to þy other sauing that it hath vpo Echinus a litel edge, whiche seteth forth Plinthus w a more beautiful Projecture. As cōserning þ Architraue or Epistiliū, that is, as before reherced a Modulus in height, whiche height ye shall deuide into 6. partes. Tenia, occupieth þy sixt part, þy other 5. partes ye shall deuid into 2. partes. Geue one part vnto þy half of Trochilus, the other part is left for þy flat square, that resteth vpon the Capital & so endeth þ Epistiliū. Now as touching þy fries or Zophorus, being also a Modulus in height, as is before rehersed of the other is like vnto it but that this swellethoute

ward

RECOLAT

SIMA. I

CORONA. H

TENIA. F

TENIA. B

TRIGLY
PHI

G METHO
PA.

D

B

A

ANNVLITRIS.

Y X T

S

V

P

A

C

S

R

Y PLINTHVS.
X ECHINVS.
V HYPOTRACHEIV.
S ASTRAGALVS.



TORVS SUPERIOR.

TORVS INFERIOR.

P. PLINTHVS.

N. ASTRAGLVS.

U. K. I. ASTRAGLVS.

L. REGVL.

K. CYMATIV.

M. COR. SPRA.

E. NICE.

C. QUADRA. TUM.

DIAGONIVM.

A.

ASTRAGLVS. H.

TORVS. G.

PLINTHVS. F.

BASI.

D.

D

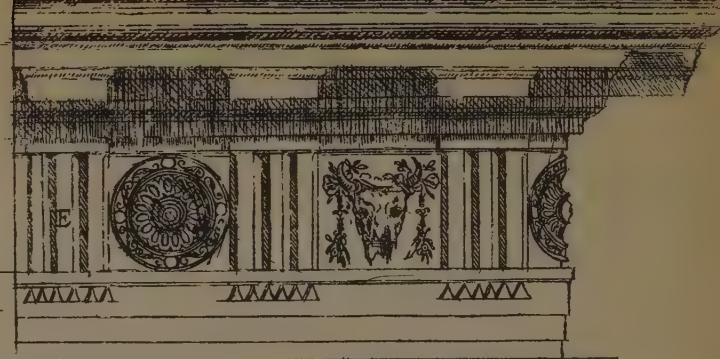
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PLINTHVS.

wardes the fourth part of a rownd compas, that is drawen aboue a square being the height and breadth of a modulus wherwith endeth Zophorus, vpon the whiche shalbe sette Coronix, the one side is like unto the other in the mesures, but that in this side Cymatium is set vnder Corona, and vpon the other side Tenia is set vnder Corona, being of one heighth. This done and finished according to this rule, so endeth the mesures and garnishmente of the first pillor called Tuscan.

Nowe for as moche as that you haue vnderstanding howe all the partes of this pillor & the rest of the pillors that shalbe, hath theyr mesures, ornatures and names, finished out of Ichnographia or ground plot vpwardes to the very top of the same worke, wherefore I thought it good for the more perfection and exercises of the gentell reader to make a Rehersall of all the partes and passelles downwardes agayne endyng in Ichnographia where I began first, these be the names T R A B E A T I O N I S. Cymatium, mar.P.Corona,mar.O.Tenia mar.N.Zophorus,mar.M.Tenia in Epistylum, mar.L.C A P I T V L I.Plinthus mar.K.Echinus, Et Annulus mar.I.Hypotracelium mar.H.C O L V M N A mar.F.Astragalus marked G, Apophiges superior & inferior, SPIRA sive BASIS. Torus mar.E.Plinthus mar.D.S T Y L O B A T E. Tenia pro Coronice mar.C. Tenia pro Basis mar.B.Ichnographia mar.A. being the parfecte square or ground plot the beginning and foundation of this worke.

C.ii

D O R I C A,

The chiefe Groundes
HERE FOLOVVETH THE MANNER AND FORME
 of the secound pillor called Dorica, being ascribed to Hercules and Mars,
 for his strength, accordinge to the rule aforesayde.



His pillor called Dorica, shalbe 7. Diameters in height, with the Base, and Capitall. Now if ye will set Stylobata, or Pedestal, vnder your pillor, thus ye shal begin. First you shall make a foure square, which shalbe your groûd, the which is in my figure marked with A. and then draw a lyne ouerthwart from the one corner to the other, which line is called Dyagonalis, and is marked with B. and that lyne being directly vpright set, one ende shalbe the height of the square or body of the Pedestall marked with C. measure and deuide that height into 5. partes the which height of the Base, of the Pedestall, shalbe as muche, as one of the 5. partes whiche is marked with D. and admittre also as muche vnto the Coronix of the Pedestalle marked with E. so that the Pedestale is 7. suche partes in height like vnto the pillor, which is 7. Dyameters, in height. The height of the Basis of the Pedestale which is marked with D. shalbe deuided into 2. partes the lowest part is for Plinthus, marked with F. the secound part deuide into 5. partes. Three of those partes geue vnto Torus, marked with G. the other 2. partes shalbe deuided into 3. partes, geue 2. partes vnto Astragalus, marked with H. the third parte is leste for the edge which Vitruvius calleth Regula, the Proiecture, of eche side of the Base, of the Pedestall as Vitruvius saith shalbe halfe a Modulus, but the antiques haue made their Proiectures like vnto their heightes. Then deuide the height of Coronix marked with E. into 3. partes geue one vnto Astragalus, with his Regula, marked with I. the other 2. partes deuide into 3. partes admiting 2. of those partes to Cymatium, marked with K. and the thirde parte thereof is leste for Regula, whose marke is L. the Proiectures of the same is like vnto their heightes. Thus endeth the Pedestale or Stylobata.

SPIRA SIVE BASIS.

Vpon the Pedestale, you shall set Spiram which is the fote or Base of the pillor and is marked with M. being a Modulus in height. that height deuide into 3. partes one of those partes is for Plinthus marked with N. the other 2. partes deuide into 4. partes, one of them shalbe for Torus, aboue marked with O. The other 3. partes that remayneth deuide into 2. partes, one of them geue vnto Torus, vnder marked with P. the rest is admitted vnto Trochitus, marked with Q. and eache of his rules, to be either of them in height the seuenthe part of that hole measure or parte. The Proiectures of the whole Basis, shalbe half a Modulus, on eche side, and thus endeth the mesures of the Basis.

SCAPVS SIVE COLVMNA.

Vpon Spira, or Base of the pillor ye shal set Scapus, marked with R. being the troike or body of the pillor the which is in height 6. Diameters. The hicknes of the pillor at the foote is deuided into 6. partes: and vnder the Capital, it is diminished one of the 6. partes that is half a parte on eyther side, and the 5. partes which remaine, be for

be for the thicknes of the pillor vnder the Capitale. From the whiche thicknes ye shall drawe downe perpendiculerly vnto the third part of the height of Scapus, wherpon is made the halfe compas the which 2. lyne shal make 2. crosses on eche side of the half compas one. Then mesure from the crosse by the side of the halfe compas vnto the lowest part of the half compas and deuide the same into 6. partes drawinge them ouerthwarte the halfe compas from the one side of the pillor vnto the other marking the endes of the lyne with 1. 2. 3. 4. 5. 6. then measure from the ouerthwarte lyne vnder the halfe compas, deuiding vpwardes to the highest of Scapus into 6. partes The which shalbe drawne ouerthwarte the pillor, the highest ouerthwarte line at the toppe of Scapus, marking that lyne with 1. on and so the other downewards with 2. 3. 4. 5. 6. Then the strike marked with 1. one vnder the Capitall is drawen downe on bothe the sides vnto the lyne that ledeth to the half compas, whiche is also marked with one. Then drawe downe righte from the strike. 2. whiche is drawin ouerthwarte the pillor at the toppe vnto the other lyne, which leadeth to the half compas. 2. and so downwardes from 3. perpendyulerly to the other lyne or crosse marked with 3. and so directly downwardes from 4. to 4. frō 5. to 5. and so likewise from 6. to 6. That done, take a rule, and drawe frō the 2. strikes which are the thicknes of the pillor vnder the Capitall to the end of the vpright line marked 2. which stayeth that lyne which is drawen ouerthwart the pillor marked also 2. and drawe from 2. to the end of the vpright lyne marked 3. and so likewise from 3. to 4. downewards: and so from 4. to 5. and from 5 to 6. So done ye haue closed vp the sides with the diminishinge of your pillor as ye may perceue by your grounde plot, the other side is lefte vnclosed, wherin ye may perceue, where the lynes do stoppe, whiche be drawne vpwardes out of the half compas. The other side of the pillor I haue closed because ye shuld see it and the better understand therby how to close and finish the diminishing of the pillors. At the toppe of Scapus, or Pillor, right vnder the Capitall is made Astragalus, with his Regula being in heighth the sixte parte of Modulus. The which Regula shalbe halfe so much in heighth as the height of Astragalus, marked with S. whose Proiectures, shalbe somuch as the pillor is diminished on eche side alike. If your pillor shall haue Canaliculos, there must be of those 20. round about Scapus, so done make a square so greate as one of those 20. partes, then drawe from corner to corner ouerthwart the square, makynge a crosse in the mydell of that square. Then take a payre of compasses and set the one ende of your compasses in the middell of the crosse, and draw with the other poincte of your compasses al a long by the side of your square frō the one corner to the other, compassing the same quarter as more plainly doth appere by your ground plot marked with A. the whiche ar the right Canalicoli, Beneth at the foote of Scapus lieth Regula, being of the same heighth that Astragalus is of at the toppe, and so endeth Scapus.

CAPITAL.

 Ppon the toppe of Scapus, you shall set the Capitall or hedde of the pillor marked with T. and is in heighth a iust Modulus, that height deuide into 3. partes Geue one part vnto Hypotrachelium marked with V. and the second part deuide into 3. partes 2. of those shalbe for Echinus, marked with X. the rest is lefte for the 3. kinges which be called Apophiges, or. Anuli, Now the thirde and higheste parte, deuyde you also into 3. partes wherof. 2. of those partes shalbe geuen to Plinthus marked with Y. the thirde parte, C. iii. which

The chiefe Groundes

whiche remaineth geue to Cymatium, and his rule or Regula, which Regula shalbe the thirde parte of that, which remaineth and lieth at the toppe of the Capitale. The Proiecture of this Capitale, shalbe correspondent with the proiecture of the Plinthus, at the foote of the pillor, and is marked with N. the whiche Proiecture, is obserued of the Antiques, in the sayd pillor, which is already finished and standeth by. Howbeit Vitruuins writheth it to be made after this sorte, to wit, that the Proiecture of the Capitale shalbe the twelueth and sixte parte of a Modulus. Thus is finished the Capitale with all his Proiectures.

EPISTYL IV M.

Vpon the Capitale, shalbe set Epistylum marked with A. the heighth therof shalbe a Modulus that height ye shall deuide into 7. partes. Geue Tenia, marked with B. the seventh parte, and geue Subtenia, and Gutta, pendante marked with C. the sixte part of a modulus to their height and that part deuide vnto 4. partes, Geue 3. vnto Gutta pendant being 6. in number, the fourth part shall be for the edge or Regula, in Epistylia vnder Tenia.

ZOPHORVS.

Vpon Epistylum, shalbe set Triglyphi, marked with D. whose height muste be a Modulus and a halfe. Also the bredth therof shalbe a Modulus, and that bredth you shall deuide into 12. partes Geue 1. of those vnto eche one of the Semicanalicols, the which stand on either syde of the Triclyphi, so remayne yet 10. paries and 6. of those shalbe for Strie, or the flathe whiche are marked with E. the other 4 paries are left for the Canalicoli, standing vpright whiche in the Triglyphi, wher vpon ye shall set his Capitale, which also is called Tenia, being in height the sixte part of Modulus and marked with F. Betwixte the 2. Triglyphos, yow shall set Methopa, marked with G. being square so high as it is broad: and in that square shalbe made a bulles bed, his hornes bound about with rybandes garnished with branches flowers and Iewelles, hanging at the endes of the Ribandes. In every second Methopa, ought to be made a faire basone or flat peace, the which inwardely shuld be garnished but I am not hable to set fourth the bewyng therof in so small a figure.

The highest parte of TRABEATIONIS, called in English a Cornishe.

Vitruuins teacheth vs that the height of it shuld be a Modulus, and that yow shall deuide into 2. partes the lowest parte deuide into 5. partes Geue 1. to Cymatium vnder Corona alio 1. other vnto Cymatium aboue Corona, the other 3. partes geue vnto Corona, whose marke is H. that second parte which remaineth of the Modulus ye shall geue vnto Syma, marked with I. Then adde the eight part of a Modulus, to be the height for his edge or Regula aboue Sima the proiectures to be like to their heightes, sauing that the Proiecture of Corona, must be twise his height by cause in it must be made, the order of Gutta, being right ouer Triglyphi, they shal be,

REGVL

SIMA L

CORONA K

DENTICULI I

CYMATIVM

CYMATIV G

SOPHORVS.

CYMATIV B

FASCLA 3 E

FASCLA 2 D

FASCLA 1 C

ABACUS V

VOLVTA X Y T

FRONS.
Y-ECHINVS.
ASTRAGALVS.

S.

V

P

A

C

R

S

TORVS O

ASTRAGALIQ S

PLINTHV N

CYMA H

TIVM I

SIMA K

P. SCOTIA SVPE
RIOR.

I-CORON

L ASTRAGALVS

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be 18 in number. & the one way and 3. the other. Right ouer Methopa, the Antiques vsed to cut in Corona Iupiters mark of the thunder bolte. Thus endeth the opinion of Vitruuius in these thinges. Neuertheles as ye may perseue by the muller or Coronis, of the antiques that stādeth on the right side wherunto they haue added Echinus, and Denticuli, with Apophigis or rule & garnished it after many beautiful facions bringing their worke to a great height, the which height causeth a fairer Projecture, which was for y further setting fourth of their workes & was pleasant to the beholders therof. If it be a gate house or gallery of pleasure hauing Ionica, or Corinthia, of him supported or standing by him: then ought he to be richly garnished. But if he stande in the gate of a citie or castel by force or strength, then ought he to be made with those strong measures, which are ascribed vnto him standing in the place of Mars, & Hercules whā be standeth with the other pillors he is like vnto Minerua, and therfore haue respecte vnto his place.

Hus hauninge finished all the measures ending now att he highest of **T R A B E A T I O N I S**. I shall name al the partes and parssels with their markes whereby is knownen the thing that is wrighten or spoken of to the clearnes or opening of matters, and an excercise for the reader to know the names by, I haue more at large spokē of this matter in the ending of the Tuscan piller, therfore I shall begine in **T R A B E A T I O N I S**. **R E G V L A**. & Sima, marked with **I**. Cymatiū, & Corona, marked with **H**. Cymatiū inferior (Echinus Regula, Denticulos) added Tenia, marked with **F**. Triglyphi, marked with **D**. Methopa, marked with **G**. Tenia, marked with **B**. Regula and Gutta, marked with **C**. **C A P I - T V L I**, marked with **T**. Regula Cymatum Plinthus, marked with **Y**. Echinus marked with **X**. Annulitres. Hipotrachelium, marked with **V**. **C O L V M N A** or **S C A P V S**. Apophiges Superior & Apophiges inferior, marked with **R**. **S P I R A** or **B A S I S**, marked with **M**. Torus superior, marked with **O**. Regula. Scotia, marked with **Q**. Regula. Torus Inferior, marked with **P**. Plinthus, marked with **N**. **S T Y L O B A T A**. Coronis marked **E**. Regula, marked with **L**. Cymatum, marked with **K**. Astragalus, marked with **I**. to the antike piller is added Corona, Regula, and Sima, Quadratum, Diagonium, marked with **J**. . the diagonall line marked **B**. Ichnographia, or ground plot marked with **A**. **B A S I S**, marked with **D**. Regula, Astragalus, marked with **H**. Torus, marked **G**. Plinthus marked **F**. in the finished piller or **B A S I S**, is as followeth Regula Cymatum reuersa. Regula Sima. Reuersa Regula, Plinthus, which maketh an end for this piller.

The chiefe Groundes
THE MANNER FOR ME AND ORDER
of the Symetria, or measure of Ionica, whiche was deuised by the
Ionians and set in the temple of Diana.



Tylobata, or Pedestale of Ionica, you shal make the boddy therof after this sorte. The flat stone, which is marked with A. shalbe a square and a halfe in height, and that height you shal deuide into 6. partes, & adde thereto such an other part for the height of the Base of this Pedestale which is marked with B & set also such an other like part for the height of the Coronix of this Pedestale marked with C. So done, y Pedestale is 8. partes in height, y height of the base marked w Bye shal deuide into 5. parts. Geue 1. part vnto Astragalus & his Regula, marked with D. the which Regula, occupieth the third parte of that one parte. Geue also to Sima reuersa, with his edge marked with E. one parte, wherof his Edge occupieth the third parte. Then ye shall geue an other parte vnto Torus, marked with F. and the other 2. partes you shall geue vnto Plinthus, marked with G. The Projecture of them shalbe like vnto their heightes. Now the height of Coronix, marked with C, ye shal deuide into 10. partes, wherof you shall geue 3. vnto Cymatium, and his Edge marked with H. and also geue 3. partes vnto Corona, marked with I. and also geue 3. vnto Syma marked with K. the tenth parte is left, for the Astragalus & his edge marked with L. The Projectures be like vnto their heightes but that Corona doth sayle ouer twice his height. Thoughe this pillor and al other pillors if it were so that they had double Plinthus, it shold not be without good cause, for the antiques haue made three Plinthus, one aboue an other, the occasion wherof is this, that the earthe shold not ouer growe the Base of the Pedestale, and so hyde the chieftinge wherupon do rest the whole ordenaunces yea and in many other places, they are necessary. the which al Architectes, and masters of buildinges ought to knowe, and many moo of those and such other ought to be knownen of them of necessitie. The occasion or cause for the whiche I haue begonne this order or rule, first with the Pedestale, (the which rule differeth from Vitruuius, for he beginneth first with the pillor, neuertheles they come to one purpose in the perfection) is for this, that firste in my Pedestale, I haue drawnen the ground plotte, whiche the Greekes call Ichnographia. For that same house or building cannot stande or endure whiche hath no good foundacion. So this is the foundacion through the whiche we knowe and finde all the measures and vprightes belonging to the pillor. In it is also found the Trabiations, the height of the Pedestale, and the brede thereof, also the height of his Base and Coronices, and the Diameter and the thicknes of the pillor aboue vnder the Capitalle, and likewise the heigthe of Spira, or Base of the pillor: and the height of Scapus, and also the h. ight of his Capitale, with all the whole Projectures, and measures whiche issueth oute of this Ichnographia. Now to come to the right understandinge of these measuris before rehersed, ye shall beginne thus. The brede of the square, whiche is the brede of the Pedestale, marked with A, you shall deuide into 11. partes wherof 8. shalbe the Diameter, or thicknes of the pillor the whiche pillor in height shalbe 8. Diameters, with the Base and Capitalle, the whiche heigthe of the Capitale, occupieth the third part of the Diameter, and the Basis marked with M. shalbe half the thicknes of the pillor in height, thus wri- teth Vitruuius, in his third booke and third Chapiter

Basis

He Basis, or fote of the pillor shalbe a Modulus in height: which is marked with M. that height you shal deuide into 3. partes, geue one part vnto Plinthus marked with N. that which remaineth deuide into 7. partes geue 3. vnto Torus, marked with O. the other 4. partes deuide into 16. parts, geue Trochilus superior with his Astragali, and rules 8. of those partes, wherof Trochilus, occupieth 6. partes, vnto the highest Astragalus, and his edge shalbe geuen a part and halfe a part, & vnto the little edge vnder Torus, geue also halfe a part, which maketh vp the rest of the 8. partes. The other 8. partes geue vnto Trochilus inferior, and deuide them also as is before rehersed. The Projecture of the Plinthus must be the eighte and the sixteenth part of the thicknes of the pillor which is the sailing out on eache side of the Base of the pillor and doth answer vnto the bredth of the body of the Pedestale, and is agreeable with the for said ground plot. The Antiques haue made also a base, which differeth not farre from the declaration of Vitruvius and after this facion they haue ordeined their Base by height therof to be a Modulus, and that height deuide into 1. partes, wherof geue Plinthus one part, as before is taught by Vitruvius. Then that which remaineth deuide also into 3. partes, wherof the highest part shalbe geuen to Torus, the other 2. parts which remaine, deuide either of them into 6. parts wherof the highest Astragalus & his rule occupieth 1. part, the which rule is halfe the height of Astragalus, also the edge, that lieth vnder Torus shalbe halfe a part in height, and that which remaineth is for Trochilus superior, wherwith finisheth the first 6. partes. Nowe geue also 1. part to the lower Astragalus, and his Edge The lowest edge that standeth vpon Plinthus shalbe in height halfe a part, the 4. partes and a halfe that remaine, shalbe left for the Trochilus inferior. The Projecture of the Plinthus is before rehersed, but because this Torus is sklenderer then that, the which Vitruvius speaketh of, it bringeth a more bewtifulnes to the Projecture, which can not be here expressed as any man of knowlaige will confesse.

SCAPVS.

SOn the base you shal set Scapus, marked with R. being 7. Diameters in height and therto adding the sixte part of the Diameter The which height of Scapus ye shall deuide into 3. partes vpon the third parte make halfe a compas, then deuide the thicknes of the pillor beneth into 6. partes. 5. of those partes shalbe the thicknes of the pillor or Scapus, at the toppe, that is halfe a part diminished, one either side of Scapus, from thence drawe downe right one both sides vnto the third parte of the pillor vpon the which is made the halfe compas The whiche 2. lines maketh 2. crossees vpon the halfe compas, Then measure from the crosse downewardes euē a longe by the side of the halfe compas, that standeth vpon the third parte of the pillor deuiding it into 6. partes and drawe these lines ouerthwart the halfe compas and marke the upper line with 1. and so marke downewardes the next with 2. and so with the reste as followeth. 3. 4. 5. 6. then deuide from the lowest of the halfe compas upwardes unto the toppe of the pillor vnder the Capitall, also into 6. partes drawing them ouerthwart the pillor and marke them also downewardes with 1. 2. 3. 4. 5. 6. or deuide it into so many parts, as you will, the moe, the better, & the parfaicter you shall diminishe your pillor. Then shal ye beginne after this maner & draw frō the strike 2. downwardes vnto the strike & crosse, which is drawn
D.j.

The chiefe Groundes

is drawen ouerthwarte the halfe compas, and is also marked with 2. and drawe also from the strike 3. which hath also a crosse made vpon the halfe cōpas, drawing vp wardes vnto ſtike marked with 3. the which is drawn ouerthwart the pillor abone, & ſo drawe from 4. to 4. from 5. to 5. and from 6. to 6. The line vnder the Capitall at the toppe of the pillor marked with 1. from thence drawe with a rule downwardes to the ende of the uprighte line, which ſtaieth at the ouerthwart line marked 2. closing vp the ſide of the pillor, and from 2. vnto 3. downewardes, and alſo from 3. vnto 4. from 4. vnto 5. and from 5. vnto 6. Then is that ſide full finished and made upright. At the foote of Scapus, is a littell ſmall edge, ſtanding vpon Torus whose height ſhalbe the ninth part of Modulus, wherof his Proiecture ſhalbe of like height. Alſo at the toppe of the pillor lieth Astragalus, and his fillet being half ſo high as the Astragalus, & alſo aboue the Astragalus is a littel Edge, the which belongeth to the Capital. The measure of his Astragalus, and his Edge, which belongeth vnto Scapus is ſoud out be the litel cōpas, which is the eye of Voluta, whose marke is X. If the pillor ſhalbe garniſhed with Canalicoli ther ſhalbe in number 24. ounde about the pillor or Scapus, and euery of them deuide into 5. partes. 4. of those partes is the brede of Canalicoli, and the fifth parte is for Striae, which are alſo called Femora. The ground plotte therof ſtandeth beſid the pillor which is marked with S. wherin ye may ſee the maner or making of Canalicoli, being half a compas inwardes, the whiche diſſereth far from the order of Dorica, as it appereth by your ground plotte. Thus endeth the maner and making of Scapus, with his meſures.

CAPITAL.

Directly and right vpon the top of Scapus, you ſhall ſet this Capitall following, whiche is marked with T. being in height the third part of a Diameter, the brede of the Abacus marked with V. as a Diameter, & thereto alſo adde, the eighteneth part of a Diameter. That ſame part deuide into 2. partes. The which 2. partes ſhalbe ſet one paie on eyther ſide of the Abacus, the whiche ſhal aide the Proiectures: ſo done Abacus is the in brede. 19. partes, then tel from the vittermoſt part of Abacus inwardes, one part and a halfe of thofe. 19. partes and there drawe a ſtrike downe right perpendulerly, as ye maye perceue by your figure here exprefed whiche on both ſides of the Capitall, hangeth a line with a plommett at eche ende. Then deuide the hanging line from the highest of the Abacus, downewardes into 6. partes a and halfe of ſuiche meaſure as is before reherfed, wherof the height of ſe Abacus is one & a halfe, of the whiche remaneth yet 8. partes on the hanging line, the which partes ſhal ſerue for Voluta, marked w. X. & thofe parts ſhalbe thus deuided. Betwixt the Abacus & the littell round Cōpas, ſhalbe 4. parts & beneath the littel cōpas is 3. partes and the compas it ſelfe is alſo 1. part. That part, whiche is the littell cōpas ye ſhal deuid his height into 6. parts. Then take a paire of compaſſes and ſet the one poincte of the compaſſes in the toppe of the ſmall compas whiche I haue marked with 1. & the other fote of the cōpas ye ſhal ſet vpon ſe line vnder the Abacus, & then turne the compas aboue & drawe downewardes vnto the lowest of thofe. 8. partes belouing to Voluta, vntil ye come to the line wher at the plomet aoth hang and there ſtay with that pomet of the cōpas, & bring the other poincte of the cōpas downe vpon ſe lowest ſtike of ſe littel cōpas, whiche is marked w. 2. Then turne vpwards ſe lowest poincte of the cōpas vntil ye come to ſe hanging line, wher ye ſhal ſtay. The other fote ye ſhal ſet vpo the ſtike marked. 2. being with in ſe littel cōpas. The cōpaſſing about w. 1. highest part of the cōpas downwards vntil ye com again to the hanging

hāging line and so remoue the highest part of the compas setting it on the strike. 4. within the little compas, and drawe vpwardes with the other poincte of the cōpas vntill ye come to the perpendicular line, staing agame there and then set the other foote of the compas right vppon the strike marked with. 5. also being within the little compas, and drawe downe wardes againe vnto the forsayde line, and so set the highest poinct of the compas vppon the strike marked with. 6. being also within the little compas. Then drawe with the other poinct of the compas vpwardes again which doth inclose the little compas. In the which cōpas may be made a rose or some other flower. Then shall ye perceue that the Astragalus, and his 2. edges are Iuste the height of the little compas, which is the eye of Voluta, and then shall the height of Echinus be 2. of those parts that Voluta was made with, the whiche Echinus is marked with Y. also that space that lieth between Echinus, & Abacus shalbe 2. of those parts in height. So done ye haue y trewe height & bredthe of y forfront & face of the Capital. It is also nedfull to know how to forme & facion the side of the Capitall. The maner & facion therof standeth betwixt the 2. pillars. The Abacus, that lieth vpon Voluta, is iust. 4. square flat like to a trencher, the Proiecture is as muche as one of the 19. partes on eche side of the Abacus, from the whiche ye shall drawe downe the 2. sides of Voluta, which is 8. of those partes. the 2. Edges that stand on eche ende of the Rolle or Voluta shal haue 1. part betwixt them both. The take a paire of cōpassē & set the one poinct of the compas at the lowest and inner parte of the little edge marked with 1. and bring the other poinct of the compas into the innermost corner of the other edge whiche is marked w. 2. drawe from thence downewardes to the figure 3. then set the poinct againe in the place marked with 2. & drawe with the other poinct of the cōpas downe to this figure 3. againe, and it shal make a crosse, vppon that crosse, set the one poinct of the compas & with y other poinct of the compas draw from the strike marked w. 1. vnto the other strike marked with 2. & it wylle shew you the diminishing of Voluta in the middel, through whch diminishing you shal perceue the endes of the Analiculi. So done the side of the Capitall, is twise so broade as it is in height, the Proiecture of Echinus, is like and equall with the Proiecture of Regula at the foote of Scapus, and so ende the Proiectures, and measures of this Capitall also the Antiques in diuers of their edifices, hath made Echinus, to be in Proiecture like vnto Abacus.

EPISTIL IVM.

 Ver the Capital or hed of the piller ye shal set Epistilium, or Arbitraue whose markē is A. the height therof shalbe a Modulus, and that height ye shall deuide into. 7. partes, one of those ye shall geue vnto Cymatium marked with B. his proiecture is like vnto his height. The other 6. partes ye shal deuide into 12. partes geue 3. vnto the lowest Fascia marked with C geue 4. vnto the second Fascia marked w D. & also geue vnto the third Fascia the 5. partes which remaineth, the whiche is marked w E. whose Proiecture or hanging ouer shalbe right and Equall with the thicknes of the piller bynethe aboue the Base. Now vnderstand that the Proiecture of these 2. highest Fascias shalbe so muche as the piller is diminished vpon the one side vnder the Capitall the whiche is the twelfthe part of the diameter, the which part you shall deuide into 9. partes, geue 5. vnto the highest Fascia, marked with E. for his Proiecture, the other 4. partes shal serue for the Proiecture of the middle most Fascia marked with D. the lowest Fascia, findeth his owne Proiecture as before is rehersed.

D.ij:

zophorus.

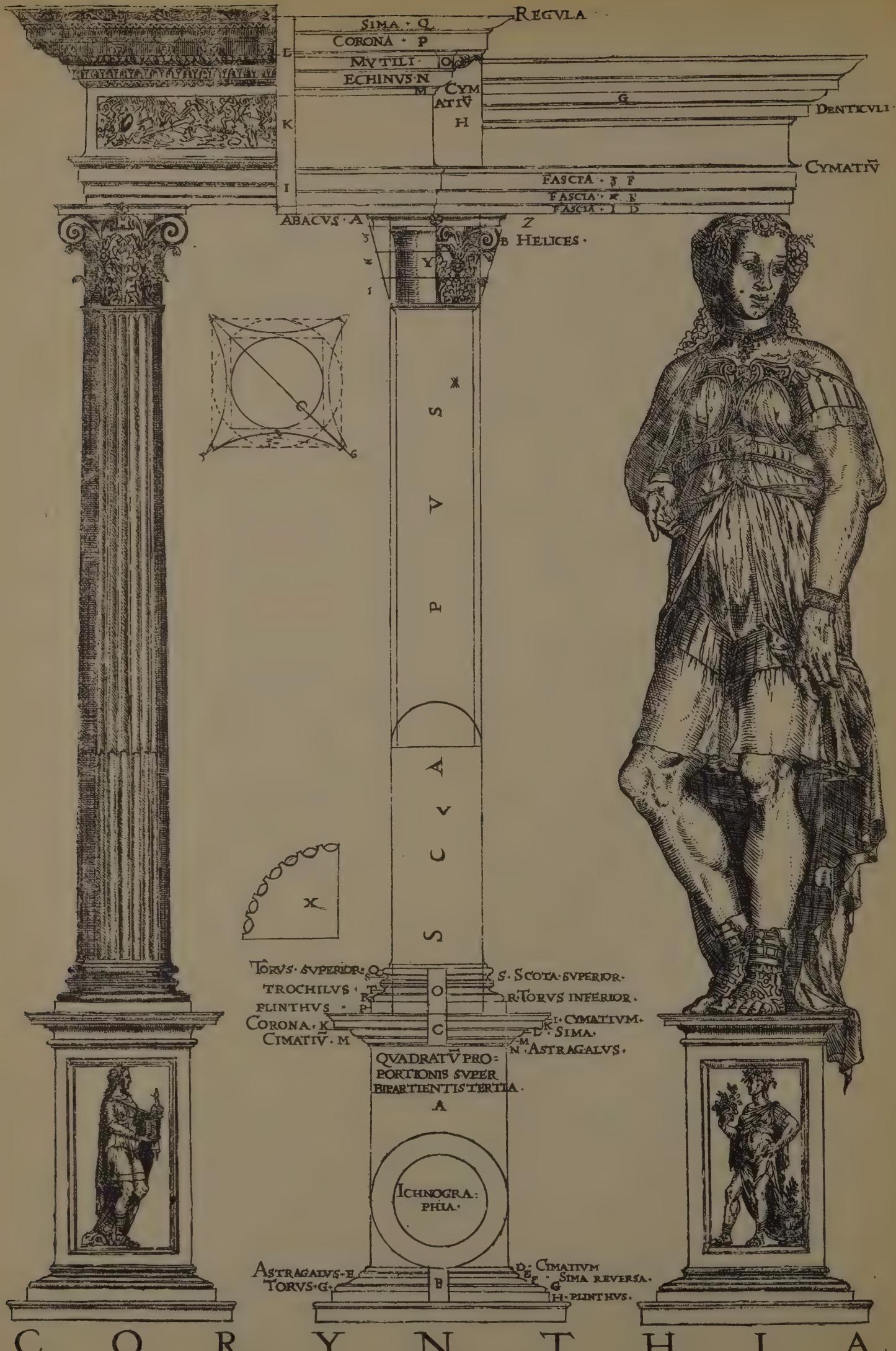
The chiefe Groundes
ZOPHORVS.

Npon the Epistiliū, ye shall set Zophorus, which is called in our Englishe tounge the frize. If any thing shalbe therin grauen or cut, then it ought to be y fourth part bigger thē the Epistiliū. If nothing shalbe wrought vñ y Frize, thē shal y frise be the fourth parte smaller then the Epistiliū. Then deuide the Frize marked with F. into 7. partes, one such parte adde thereto for Cymatum, marked w G. let his Projecture be also as muche as his height. That donneye shall begin with the Coronix, marked with H. the which is the highest parte of the Trabeation. Ouer Cymatum, shalbe sette Denticuli marked with I. whose height shalbe so much as the height of the myddlemost Fascia, and his fillet to be the sixt part of Denticuli, and aboue Denticuli, ye shall sette Corona marked with K. and the height therof shalbe also like vnto the mydell Fascia. That height deuide into 4. partes, one of those partes admit vnto Cymatum aboue Corona, the Projecture of the Denticuli and Corona with Cymatum, hangeth ouer so much as the frize is in height, if the frize be the fourthe part diminished. Thus writeth oure Author Vitruvius. Ouer Corona shalbe set Sima, marked with L. whose height shalbe the eight part bigger then Corona, with his Cimatiū & his Edge at the toppe to be the Sixte part of Sima added thereto, the Projecture to be like vnto his height, and so endeth the measures of Ionica.



Hus haue ye endid at y hiest part of Trabeationis whose marke is H. Regula the edge of Sima marked L. Cymatum, Corona, marked K. added ouer the womā Mutilos, & his Capital, Denticulus, marked I. Zophorus, marked F. Cimatiū marked G. EPISTYLIVM marked A. Cimatiū marked B. Fascia prima, marked C. Fascia Seeūda marked D. Fascia Tertia marked E. CAPI TVL I, marked T. Cymatum. Abacus, marked V. Frons Voluta, marked X. Astragalus. COLVMN A, vpon the pillor noted Scapus, marked R. Apophigis superior. Apophigis Inferior. BASIS, marked M. Torus marked O. Regula, Scotia, Superior, marked P. Regula, Astragalus Primus, Astragalus Secundus marked Q. Regula, Scotia, Inferior, Regula. Plinthus, marked N. Coronix, marked C. Regula. Cimatum marked H. Corona, marked I. Regula, in the finished piller is added Echinus, Regula Sima, marked K. Astragalus marked L. Regula. Quadratum. Sesquialtera. BASIS, of the pedestalle marked B. Regula. Cimatum muersa addid Regula. Astragalus marked D. Sima Reuersa marked E. Regula. Torrilus, marked F. Plinthus Primus marked G. Astragalus, Regula, Plinthus inferior being added vnto the Base of the pedestall for to increase his height and also for an other purpos most nesseary if the pillor stand on the ground and no stepes vnder the pedestall in the whiche bodye of the pedestall is demonstrated Ichnographia, where in I begane and also make an ende

C O R Y N T H I A



C O R I N T H I A .

HERE BEGINETH THE PILLOR
*that was founde in Corinthia, by Callimachius the excellent
 Architect of Corinthe.*



O beginne with the Pedestal of Cormthia, ye shal enter thus, The flat stone or body of the Pedestal shalbe a square & 2. thrid partes in height the which is marked with A. whose height ye shal deuide into 7. partes adde such a part unto the Base of the Pedestall, marked with B, and afmuche for the Coronix, whose marke is C. Then deuide the Base of the Pedestall marked with B. into 7. partes Geue one vnto Cymatium, marked with D. and one vnto Astragalus, with his Regula, marked with E. Then geue 2. vnto Syma reuersa marked with F. with his fillet, Then geue one part vnto Torus, marked with G. the other 2. partes admitte vnto the highest Plinthus, marked with H. the Proiecture, of this Base is like vnto his height The other Plinthus, is added therunto, the cause wherof is mencioned and declared before in Ionica, Then deuide Coronix, marked with C. into 10. partes Geue vnto Cymatium aboue marked with I. 3. partes of the which his fillet shall haue. 1. part Then admit also 2. partes to Corona, marked with K. and also 2. partes vnto Syma and his fillet or edge marked with L. the other 2. partes geue vnto Cymatium with his edge marked with M. and the tenth parte admit vnto Astragalus & Regula, marked with N. vnder Cymatium, the Proiecture ye shal make like vnto their height sauing onely Corona, whiche ought to hange ouer 2. thrid partes more then his height the which is a beautie vnto the whole Coronix and so endeth the measures & Proiectures, therunto belonging.

BASIS.

Now ye shal finde the measures of the thicknes of the pillor, which is the Diameter, as doth follow, deuide the bredthe of the boddye of the Pedestal into 6. partes, wherof the diameter or thicknes of the pillor shalbe 4. such parts & þ height of the pillor shalbe 9. Diameters, wherof the Capitall shal haue 1. Diameter, for his height, & also the height of the Base shalbe halfe a Diameter, whiche base is marked w^o O whose height ye shall deuide into 4. partes wherof the Plinthus, marked with P. occupieth 1. part. The other 3. partes deuide into 5. parts. Geue vnto Torus, aboue which is marked with Q. one part, & the Torus, beneth shalbe þ forth part greater then the Torus aboue, & is marked with R. that which remaineth between the 2. Torus deuide into 2. partes, of the highest part ye shall make Trochilus, marked with S. wherof the Astragalus, shalbe the sixte part, and his edge shalbe half his height, the other edge that lieth vnder the bighe Torus, shalbe in height the third parte more then the height of the other edge. The second part that remaineth is for the nethermost Trochilus or Scotia, marked with T. whose Astragali, shall also be in height the sixte part of Trochilus, and his edge shalbe halfe his height, the other edge that lieth on the nether most Torus, shalbe in height 2. thrid partes of the height of Astragali, the Proiecture of this base is thus. If this pillor stande vpon any other pillor, then shall the Proiecture therof be like vnto þ Proiecture of þ Base of Ionica, & if this pillor stand vppō þ groun̄d, or being alone by himself the shal this Proiecture of the Base be like þ Proiecture of the Base of Dorica, & thus endeth the Base of Corinthia.

The chiefe Groundes
S C A P V S.

Vpon the Base or foote of the piller ye shall sette Scapus, marked with *V*, whose height is 7 Diameters and a halfe, whose thicknes is diminished the sixte part of the toppe of Scapus, vppon either side half a parte as is before sayde vppon the third part of the height of Scapus, ye shall make the half compas, through the which ye may finde a faire diminishing as I haue said before in Thuscana, Dorica, and Ionica. If this piller be garnished and filled with Canaliculi, and Striges, whiche Vitruuus calleth Femora, there shalbe 28. in number rounde about the piller. The measures of them I haue before rehersed in the Ionica, sauing onely from the third part of the piller downewardes, Astraguli be made and set vpright round abouthe the piller within the Canaliculi, the maner therof you shall finde in the ground plot, the which standeth here betwene the 2. pillars & is marked with *X*. The Proiecture of Them doth answer iustly with the thicknes of the piller: at the toppe of the piller shalbe made Astragalus & his edge, the which shalbe the twelffe parte of a Diameter in height. The Proiecture therof is somuche, as the piller is diminished on either side, and thus finysheth Scapus.

C A P I T A L.

Capitall Vitruuus maketh mencion in his fourth boke and first chapiter vppon the said Scapus, which is the body of the piller, ye shal set the Capital being a Diameter in height, and is marked with *I*, that height deuide into 7 partes, admit one vnto Abacus, marked with *A*, the which parte ye shal deuide into 3 partes geue 1. vnto Cimatiuum and his edge, the other 2. partes geue vnto Plinthus, the other 6. partes that remained from the Abacus downewardes, deuide into 3. partes, geue one part vnto the shortest leaues and also one other to the height of the myddle leaues. The third part is left for the height of Clauiculi, Vitruuus calleth it in themakinge of the Capitale of Ionica, Voluta, and is in this Capitall marked with *B*, being that which goeth out of Caulis, and turneth to 4. Corners of the Abacus and they be in nomber 8. rounde about the Capital, the which closeth together at the 4. corners of the Capitall, also there be other smaller, that are called Helices, the which springe out of that which is the budde or Caules, and growe vnpwardes right vnder the Abacus and haue but halfe the height of the other greater Helices, or Volutas and also 8 of them be rounde about growinge also 2. and 2. togithers vnder the 4. forefronts of the Abacus, ouer the whiche standeth the flower or Rose in the myddell of the Abacus whose height is equall with the thiknes or heigt of Abacus, being 4. roses or flowers in nōber in the 4. frontes of the Abacus. Also vnder the Abacus is a certaine square edge named Tenia, whose height is half somuche as the Abacus is in height, his Proiecture answreteth to the thicknes of the piller or Scapus, benethit he which is the Diameter, Concerning the other Proiectures, they beginne thus. The Proiecture of the Abacus answreteth & is like vnto the Proiecture of the Plinthus of the Base or foote of the piller, and sailleth ouer somewhat more then the Plinthus. Nowe to knowe how muche the Abacus hangeth ouer more then the Plinthus of the Base of the piller, the which is shewed in the ground plotte named Ichnographia, and is marked with *C*, whiche grounde is to be made thus. Make you a rounde compas beinge of the thicknes of the piller then make a square without that compas and also make an other compas, so grate as maye

maye be, touching the 4.corner. of the sayd square, also set that compas within an other square, touchinge the 4.sides of the great compas. So done we shall come to the right ground and fassion of the Abacus, the which lieth on the vase or basket, that was founde on the maydens to be in Corinthe, as before is reb. rſed. Now let vs finishe and ende the grounde plotte of the Capital. That space which is left bitwene þ two squares righte in the myddell of one of the sides, deuyde you in to 4 partes. Then take a paire of compas, setting the one poinct of the compas righte in the Corner of the greate square beinge marked with 5. and the other poincte of the compas bring vnto the other corner of that square marked with 6. and so drawe downewardes towardes 7. then bring that poincte of the compas, vppre agayne and set it in the place that it came from, and bringe downe the other poincte of the compas, from 5 vnto 7. and there it shall make a crosse. Then set the poinct of the compas, in the middes of the crosse and the other poincte of the compas sett vpon the strike between the 2.squares, the which is marked with 3. and so drawe with the compas from 3 to 5. and againe from 3 to 6. and vse all the other sides in lyke maner, and so through itye shall knowe the trewe Projecture. Nowe to knowe whither this grounde be vprighte or not, ye shall make a strike ouerth warte the greate square from corner to corner, that line is named Diagonus, whose marke is C. being in lenght. 2. Diameters. So done is the grounde plotte of this Capitall, vpright and trewe, the which bringeth with it, his trewe Projecture. Also ye shall perceiue in this Capital, marked with L. that frō the Uttermoſt of the Abacus, marked with A. is drawnen a line by the ſide of the Capital, downewardes vnto the Astragali, that lieth vnder the Capitall, whose Projecture, is ſo muche as the pillor is diuined on the one ſide. Then ſhall the Projecture of the Voluta or greate Helices, marked with B. touche the line that is drawnen by the ſide of the Capitall. The long leaues alſo vnder the Voluta, ſhall touche that line and in lyke caſe the ſhorte leaues. So done you haue your right and parfaicte grounde and the trewe vprighte measures of this Capitall with all his Projuctions. Touchinge this pillor that standeth on the other ſide, the whiche is Antike: it standeth in an Arch triumphale, whose height is. 29. modernelles and. 15. minutes, the length of which elle, containeth. 22. inches and a halfe. In Pantheon within Rome, and diuers other places in Italie are theſe pillers founde ſtanding in good estate. For this cauſe haue I ſette this Antike pillor here beſide that ye ſhould perceiue the heawtie whiche is in it, the whiche diſſereth littell from the firſte inuenition of Vitruvius. The bodie of this ſaide pillor is garniſhed with Canaliculi, & the nober of the is. 26. or 28. whose Capital, is a Diameter, in height beſide the Abacus, and the Abacus added thereto is the ſeuenth parte of a Diameter, his height to maintaine: the Antiques affirme that the firſte Author hath mente it thus the Capitall to be a Diameter in height beſide the Abacus, the height therof is before reberſed: alſo as muche as they haue added vnto the Capitall, ſomuche haue they diuined of the height of Scapus, So that the pillor remaineth yet. 9. Diameters in height, yea and ſome hath added the ſeuenth parte thereto. Neuertheles it is heawtfull that they haue made, the other I do leau to the diſcreciones of them whiche are or wilbe maifters in this worthie ſcience, of Architecture. And thus finiſbeth the order of this Capitall.

ARCHITRAVE, FRISE, AND CORNISHE.

The chiefe Groundes

As touching the Architraue, frise, & Cornish, beloing to Corinthia, Vitruvius maketh no great mencion therof, Neuertheles he doth describe the beginning of Mutili to be necessarie in all Mullers to be made as ye may perceiue by the antique workes or buildings. But this Architraue, frise, and Cornishe, shalbe like vnto that whiche was made for the Ionica, but vnto this Cornishe, is added Echinus, marked with G. standing betwixt Denticuli and Corona, being in height like vnto the vndermost Fascia, marked with D. the Proiecture of the Cornish, is increased somuche as Echinus is in height also vnto the Architraue is added vnder the seconde Fascia, marked with E. Astragalus, being in height the eight parte of that Fascia, make also that Astragalus, to be in height the eight part of the highest Fascia, marked with F the whiche Astragalus, shalbe as it were certaine rounde beryes and the other Astragalus, that lieth vnder the myddle Fascia, shalbe wrothonne like a wreathas concerning the Frise, it is to be orderid as before is mencioned in the measures of the Ionica, the proiecture of the foresaid Architraue, is before rehersed in Ionica.

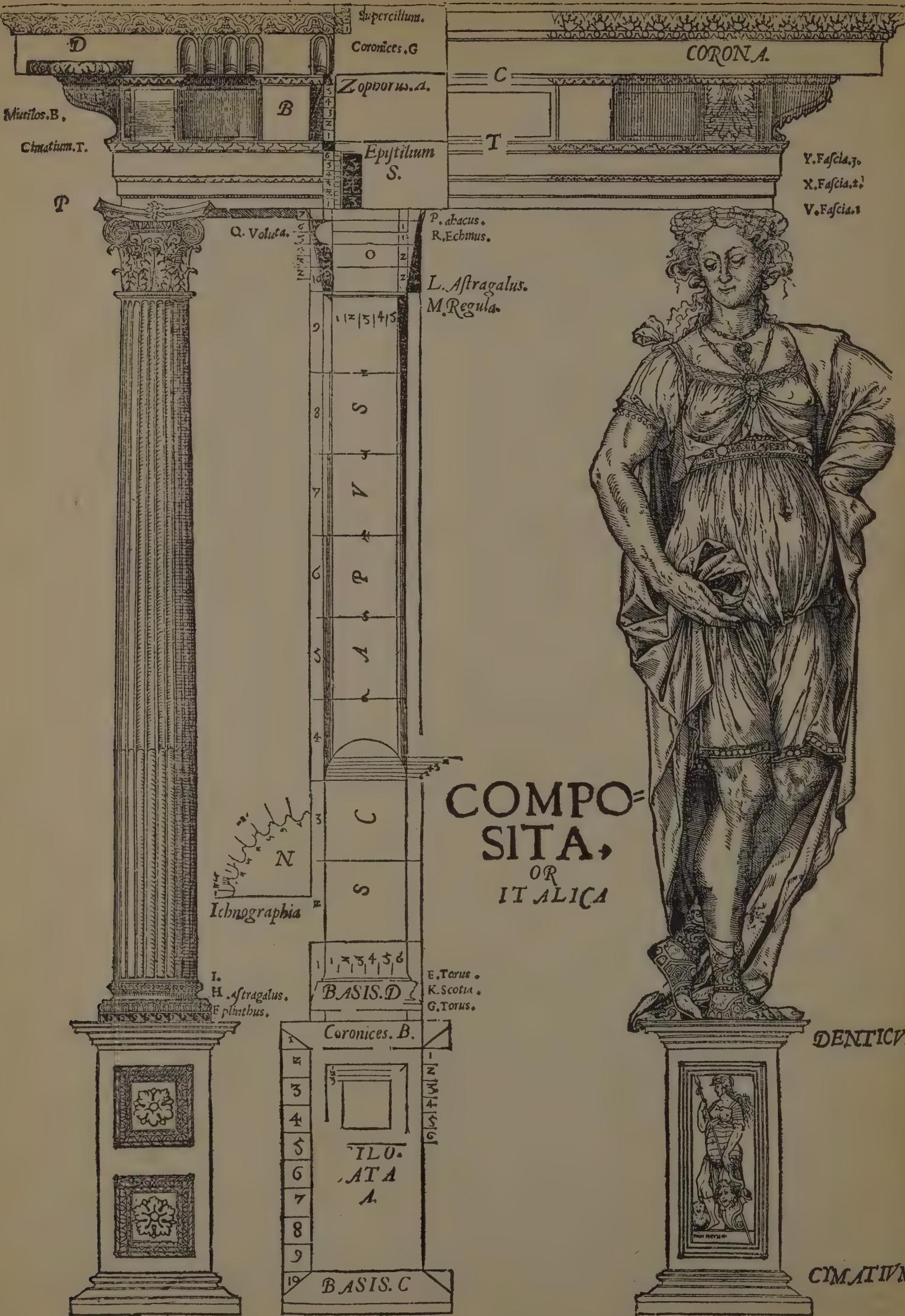
Now it behoueth to make mention of an other order and cōmen rule that the antiques heretofore haue vsed in their time of buildinges appertaining to the whole Trabeations of the Corinthia, the measures is as hereafter followeth. Deuide the height of the pillor with the Base and Capitall into 4. partes, the which whole Trabeationes, shalbe in height as muche as 1. of the 4. partes of the height of the pillor, and that height deuide into 10. partes, wherof ye shall geue 3. vnto the height of Epistilium, the which we call Architraue, marked with I. and also geue 3. vnto the height of Zophorus, which we cal yfrese, marked with K. those 4. which remaigne geue vnto yCornish, which Vitruvius called Coronices, marked with L. Cōcerning these 4. partes that are geuen vnto Coronix, deuide you into 9. partes geue 1. vnto Cymatium marked with M. and geue also 2. parts vnto Echinus, with his edge whose marke is N. and also geue 2. such partes vnto Mutili, whiche is also named Modiglions, with his Cymatium marked with O also geue 2. of those partes vnto Corona, and his Cymatium, whiche is the forthe parte of Corona, and is marked with P. and the other 2. partes geue vnto Syma, and his edge at the top which is the eight part of the whole Syma, which is marked with Q. The Proiecture, shalbe as before is rehersed sauing onely that Mutili, shall hange ouer so farre as ye maye conueniently not hyddinge or shadowing his Cymatium the which doth answere right to the Proiecture of Corona. Vitruvius declareth also the whole height of the Trabeationes, to be the fisthe part of the lenght of the pillor, & so he writteth that it was made in Theatrum, wherof he maketh mention in his fift booke and seventh chapiter, this Trabeatione, is of that height the whiche he speake of and is marked with H. Now as touching the other side that standeth ouer y garnished pillor, that is also antique, it is enriched beawtifullie havinge in it Denticuli, Echinus and also Mutili, the which Vitruvius, doth not allowe saing in his forth booke and second Chapiter, that Denticuli, & Mutili ought not to stande, or be made in one Cornishe or Coronix as ye may perceiue by the other Coronices for that which standeth in the myddes bath Mutili, and Echinus and bath not Denticuli, also the other Coronices that standeth ouer the Image bath in it Denticuli, & Echinus, but not Mutili. So that which hath Mutili bath not Denticuli, and likewise that, whiche hath Denticuli must not haue Mutili, So that both these Coronices, haue their alteraciō ye both obserue the Rule of Vitruvius, To the third Coronix, that the antiques, haue deuided in their buildinges

buildinges they haue added Mutilos or Denticulos according to their willes & haue garnished it most triumphantly, as is manifest in diuers of their doinges. For the whiche they ought to be commended. For Vitruuus saith, that Mutili shalbe a necessary thinge in all Coronices, and he tracheth also, that Denticuli shalbe obserued in Ionica, seeing that it may be suffered in Ionica, it is necessarye to be obserued in Corinthia, and is made in Italie to their commendation and fame, whose Prouincie therby doth more abound in beautie. Thus ende the measures and the makinge of Corinthia.

Neuerthelesse I think it good to make a brief rebefall, retourning to the place where I began at, & also for that her is added diuers thinges, in the 3. chaunges off Trabeations in englishe calted architraue, frije, and Cornishe, the first and higest is Regula Sima marked Q. Cymatium Corona marked P. Cymatium Mutili marked O. Regula Echinus marked G. Astragalus & Apophiges Denticuli Cymatium marked M ZOPHORVS marked K. EPISTYL IV M marked I. Cymatium Fascia marked L. with his Astragalus. Fascia secunda marked E. Astragalus Fascia tertia marked D. CAPITVL I marked X. Abacus marked A. Flos Voluta Maiores marked B. Voluta Minores. Folia Minora. Caulis Folia media. Folia ima, COLVMN A marked V. Astragalus Apophiges Superior et in- ferior. BASIS marked O. Torus Superior marked Q. Regula Scotia Superior marked S. Regula Astragalus Primus Astragalus Secundus Regula, Trochilus marked T. Regula, Torus inferior marked R. Plinthus marked P. STYL OBATA, Coronis marked C. Cymatium marked I. Corona marked K. Sima marked L. Cymatium marked M. Astragalus et Apophiges marked N. Quadratum Proportionis super Bipartientis Tertia marked A. BASIS to the same marked B. Cymatium Reuersa marked D. Astragalus marked E. Sima Reuersa marked F. Torulus marked G. Plinthus marked H. Astragalus et Regula, Plinthus inferior, last of all ICHNOGRAPHIA the ground plotte and foundation where with this worke began and also endeth:

Ej.

¶ C O M P O S I T A.



COMPOSITA OR ITALICA THE TRYVMPHANT

pillor, deuided by the Romanes, and fetcheth his compoundes out
of all the other before rehersed and written.



His pillor named Composita shalbe. 10. Diameters in height, the which Dyameters are drawen ouerthwart the pillor, whereof the Capitall, is a wholle Dyameter in height, and Spira or Base is halfe a Diameter in height. Now as concerning y measures of the Pedestal, the bredth of the square stone which is the bodye of the Pedestall shalbe doubled in the height, whiche Phitander nameth the quadrante of the double proportio which is marked with A whose height shalbe deuided into 8. partes, one suche part ye shall adde to the height of his Coronix, marked with B. as muche you shall adde vnto his Base marked with C the other measures therin belonging shalbe as before is rehersed in the Corinthia, but in this Base is added Cymatum which lieth betwene Astragalus, & the square of the pedestal. Also Coronix is to be made as before is rehersed in Corinthia, but that in this, they haue added Denticulos, the which lie betwene Cymatum and Echinus, throughe the which it mounteth to a forther Projecture, the which the Romaynes haue done for the more pleasure of the eye. As touchinge the bodye of the Pedestall they haue garnished it beautifuly after diuers sortes as by these finished figures, ye maye perceiue. Nowe as the other Pedestalles before mentioned, were parted and deuided into so many partes as the pillors were Diameters in height, so is this Pedestall 10. partes in height of the which, the Base occupieth the lowest part, which is marked with C. Also y double square occupieth eight partes to his height, & the tenth part is admitted to Coronix, marked with B.

BASIS or SPIRA.

Right and directly vpon the middell of the Pedestall shalbe set Spira or the Base of the pillor marked with D. whose height shalbe a Modulus, or halfe the thikness of the pillor, y which height ye shal deuide into 6. partes geue one part vnto Torus aboue marked with E. y other 5. partes shalbe deuided into 3. partes geue one part vnto Plinthus marked with F. the other 2. partes you shall deuide into 12. partes wherof ye shal geue 5. partes vnto Torus the lower marked with G. geue also 2. partes to the two Astragalli with their Rue whose marke is H. the which edge or regula, is in height y one half of 1. Astragalas, geue also 1. parte vnto that, which is marked with I. some name it Echinus, but the garnishing therof is not like Echinus, which lieth vnder the higher Torus, whose edge shalbe half a part. So that the highest Torus, & Scotia marked with K (the which y grekes call Trochelon) be very nigh of one height. The Projuctions of this Base are as before is rehersed in Corinthia.

SCAPVS.

SCAPVS. He body of y pillor shalbe .8. 1/2 Diameters in height, y which are drawen ouerthwart the pillor. Now as touching the diminishing of the pillor aboue ye shall begin thus vpon the third Diameter there ye shal trie the middle of the pillor vnder the Capitall. Then deuide the thicknes of your pillor into 6. partes that is 3. on eche side of y middle of the pillor and ye shall settē 5. suche partes for the thicknes of the pillor vnder the Capitall, E.y. which

The chiefe Groundes

which shalbe .2. and a halfe on eche side of the pillors myddel, from the which thiknes of the pil-
lor vnder the Capitall drawe both the sides downewardes perpendicularly vpon the thirde
Diameter wheron ye shall make a half cyrcle so greate as it maye be within the Diameter or
thiknes of the pillor and it shall make on eche side a crosse ouer the perpendicular line, measure
from the crosses downewardes even vpon the strike of the half cyrcle or compas to the ouertha-
wart strike vpon the third Diameter & deuide it into .6. partes, making .6. lines crossing ouer
the half cyrcle. And ye shall begin to drawe from the line marked .2. in the halfe cyrcle vnto the
ouerthwart line at the toppe of the pillor marked with .2. and also from the line of the halfe cyr-
cle .3. drawe vpwardes perpendicularly to the ouerthwart strike marked with .3. and so drawe
vpwardes from .4. to the ouerthwart line marked .4. and so from .5. to .5. and also perpendicu-
larly drawe from .6. to .6. Then take a rule and drawe from Diameter vnto Diameter downe-
wardes, closing vp y^e side of the pillor as you may perceue by your figure, for I haue drawnen &
closed the one side of the pillor, and the other side I haue lefte open that ye should plainly per-
ceue the working therof, the height of the Diameter, vnder the Capitall, ye shall deuide into
.12. partes the higest part shalbe deuided into .3. equall partes, wherof ye shal geue .2. vnto Astrag-
alus, marked with L. and the third part shalbe geuen to the edge or Senta, which is marked
with M. Also an other litle square edge, which lieth vpon the Base being at the lowest parte of
Scapus shalbe in height like vnto Astragalus, at the top of Scapus. Concerning the garnishing
of the body of the pillor or Scapus, which oure authour calleth Canaliculi and Striges, the anti-
ques haue deuised so many sundry sortes, that herin the beawtye of them cannot be exprefſed.
But amonege all other in Pantheon, is a pillor thus deuided. Ther be Canaliculi, round abougt
the pillor .24. in number, and eache of them is deuided into .9. partes, of the whiche partes .4. is
geuen vnto that, whiche oure authore nameth Striges, vpon the whiche are made vpright in
the middle therof Astragali, whose bredthe is .2. of those .4. partes, the other .2. partes are lefte
for Striges. So that vpo eache side of the Astragali is left one part. The other .5. partes are lefte
for Canaliculi, the whiche are hollowe inwardes. There is an other pillor, the whiche standeth
in Basilia del foro transitorio, in Rome, the whiche is made much after one fashion but that the
Architect hath made his Canaliculi somewhat biggar or largar. And that measure is thus. The
pillor rounde about shalbe deuided into .28. or .32. partes. The occasion wherfore the number of
those doth differ, is for the placinge of the pillor standing farre or nigh vnto the eye, for if this
pillar stande farre from the eye, there shalbe in number .24. and at the most but .26. And if the
pillar standeth nigh vnto the eye, there shalbe in number .28. or .30. and at the moste, they made
.32. rounde about the pillor. Nowe eche of those partes shalbe deuided into .3. partes, let .2. of those
partes be geuen to Canaliculi, the thirde parte ye shal deuide into .4. partes wherof geue .2. vnto
Astragali, and the other .2. that remaine geue vnto the Striges, that stande on eche side of
the Astragali, the bredthe of eche of them is a parte, as ye may perceue by this Ichnographia
the whiche figure is and standeth here betwene your 2. pillors being your parfaict ground of
the bodye of the pillor or Scapus, whiche is marked with N. Thus finisheinge the measures, the
Projectures shalbe as is before declared in making of the other pillors.

C A P I T A L.



N the toppe of Scapus, or pillar shalbe sett the Capitall, whose height shalbe a Diameter, in the which Capitall Abacus with his long and shorte leaues, and his Caules out of the which spring the smaller Helices, be a portion taken from Corinthia. Also they haue brought to pas in this Capitall Voluta and Echinus and Astragalus, with his rule, which is and are portiones of Ionica. The measures of this Capital are thus. From the pillar vawardes to the toppe of the Capitall, that is marked with O. whose height is a Diameter shalbe deuided into 7 partes, wherof one shalbe geuen to Abacus, lieng at the toppe of the Capitall, which is marked with P. the which partes, some Architectes haue added to the height of the Capitall, so that they haue made it to be in height a Diameter, and the seuenth parte of a Diameter, as before is rehersed in the Capitall of Corinthia, but so muche as they haue added to the height of the Capital, somuche haue they abated from the height of Scapus. Nowe of the forsaid 7. partes, doo remaygne yet 6. the which shalbe reducea into 3. partes, the one shalbe geuen vnto the shorte leaues for their height, the second part shalbe added vnto the height of the myddle leaues, and the third part vnto Voluta, marked with Q. as for the height of Echinus, marked with R. shalbe founde in the makinge of Voluta, as before is mencioned in Ionica. The Projecture of this Abacus, whose marke is P. shalbe euene so muche as is the Projecture of the Plinthus, the which is the lowest parte of the Bases of the pillar euene as it is before saide in the ground plot of Corinthia. This done drawe from the vtter moste of the Abacus, downewardes along by the side of the Capitall, vnto the vttermost of the Astragali lienge vnder the Capitall, whose Projecture, shalbe so muche as it is in height. This done you shall cause Voluta to touche the strike that you haue drawnen by the side of the Capitall, and also the myddell and longe leaues vnder Voluta, shall haue their Projecture to touche that line, and also the shorts leaues shall touche the same. This done ye haue the true measures and projectures of this Capital, but there be diuise other beautifull Capitalls, belonging to this pillar whiche hereafter more plainlye shall appere.

EPISTYLIVM.

SHe height of this Epistilium, or Architrave marked with S. shalbe the thiknes of the pillar aboue vnder the Capitall, but if this pillar shall standenighe vnto the eye then make the height therof, as before is rehersed in the other pillars, which height shalbe deuided into 7 parts wherof one shalbe geuen vnto Cimatiū marked with T. the other 6. parts, deuided into 12. partes, geue 3. of them to the firste Fascia, marked with V. also geue 4. to the second Fascia, marked with X and geue 5. vnto the third Fascia, marked with Y. Under the second and third Fascia, shalbe added Astragali with Apophysis, to the garnishing therof, the Projectures, and measures shalbe as is before rehersed in Corinthia. Vpon the Epistiliū, ye shall sete Zophorus or Frese marked A. wherin Mutili doth stand being in height like to Epistiliū, the Mutili shall stande right ouer the pillar, their breadth shalbe the fifte parte leſſe then the thicknes of the pillar vnder the Capital, and they be marked with B. whose height shalbe deuided into 6. partes, Cimatiū occupieth somuche as one of the 6. partes added for that whiche is the Capitall vnto the Mutili, & is marked with C. the space betwene the 2. Mutili, shalbe so muche, as twyse the breadth of Mutili, the Projectures of Mutilos shalbe as muche as the wholle Mutili is in height. As touching the Coronices, the one side differeth from the other, both being

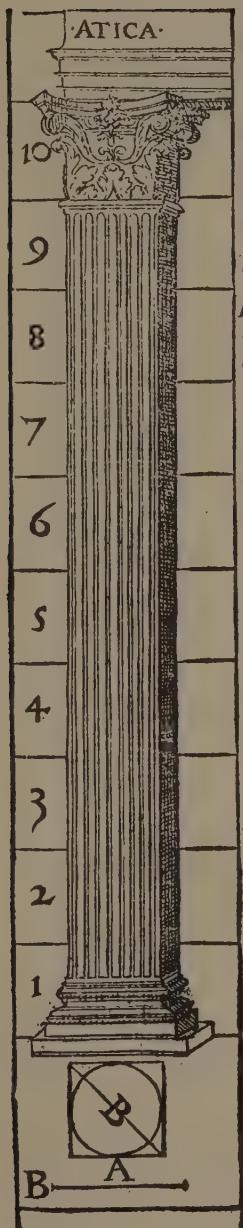
Eij.

fayre

The chiefe Groundes

fayre, take of them which pleaseith your mynde best, their heightes shalbe like vnto y height of Mutilos. Then ye shall deuide that side ouer the pillor into. 7. partes. Geue. 4. vnto Corona, marked with D. also geue. 2. vnto Cymatium, marked with E. the seventh parte is leste for Supercilium or Regula, marked with F. The Projecture therof shalbe lyke their heightes the other side of the Coronix, ouer y maiden which is marked with G. shalbe deuided into. 2. equal partes, the lowest parte shalbe geuen vnto Corona, the seconde parte shalbe deuided into. 5. partes geue one vnto that with his edge which is like to Echinus, geue. 3. vnto Cimatiū, and the fisthe parte geue vnto Supercilium. The Projectures of Mutilus with the Coronix shalbe somuche as they be both in height, Mutilus standing in Zophorus, the antiques haue devised for a commoditie and a beawtie to their edifices. But the cause why they were sette in Zophorus with diuers other monuments thereto belon-
ging herafter shalbe declared as time shall serue.
Thus haue I finished for this time the figures,
garnishementes, and measures, of these
faine pilleres before specified.

OF AN OTHER AVTENTIKE PILLER AND A
nescessarie Companion to the before named pillars made by the Atheniens
to his perfection named ATTICVRCA.



If this pillar Plinius maketh rehersall and as he saith
is a corner pillar, being foure square, whose Diameter
marked with A. (saith he) is like vnto the roud pillers,
which he standeth by but in y Diagonall line marked
B. he is thickerthen the rounde pillers. It is that pillar
which Vitruuius nameth Atticur ga or Attica, made
by, y Atheniens, the which natiō vsed also y mesures of Corinthia in their
pillers. So that the Capital of this foreside piller, is much like to y Capital
of Corinthia. The Spira, or Base of the saide Attica, wherwith also they
vsed to garnish Corinthia, Vitruuius, also, witnesseth of suche a piller, decla-
ring and saith, that Spira attica should be like vnto Spira or Base Ionica.
Thus haue you all the maner and measures of pillers that anye notable
maisters of Architecture or Authours therof haue written. As in order
do followe. Tuscana conteineith in height . 6. Diameters Dorica . 7.
Diameters in height . Ionica . 8. Diameters in height , Corinthia . 9. Dia-
meters in height , and Composita, contaigneth . 10. Diameters in height ,
Nowe of this forsayde piller Atticurga, I finde no mencion made of his
height. But of the multitude of his Canaliculi, whiche be . 7. on either side
of the piller. And as touchinge his height, wheroft no mention is made, it is
to be thought that he must beare suche height as the rest of the pillors for
Vitruuius saith that y highest piller passeth not . 10. Diameters, in height
so that his height may be agreeable to the height of those round pillors that
are loyned with him, whither they be Composita or Corinthia, which I my
selfe haue sene in Rome in the arke triumphant of Seuerus, beinge
ioined with Composita, also in Pantheon where his three sides
plainely are sene, the fourth standing in the wal, the Capital
and base is like to the round pillors, wherwith he standeth
being Corinthia. The Projecture of his base was like
vnto Spira attica, the which is halfe a Mo-
dulus, on either side of the Base, the
which Vitruuius more plainly
at large declareth.

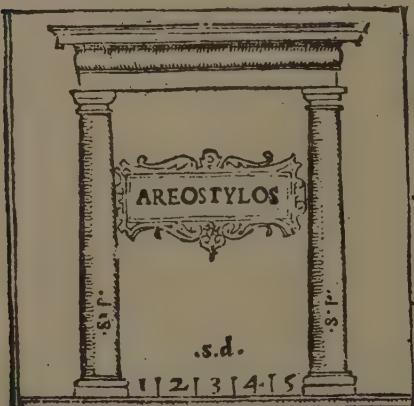
The chiefe Groundes

¶THE CHAVNCE OF THE FIVE PILLERS ORDERLY
 to be vsed eche of them in hiskynde whiche order of buildinges be named of Vitruvius
 as followeth **PIC NOSTYLOS, SISTYLOS, DIASTYLOS,**
ARIOSTYLOS, EVSTYLOS, whose pictures in few th
 demonstrated in order.

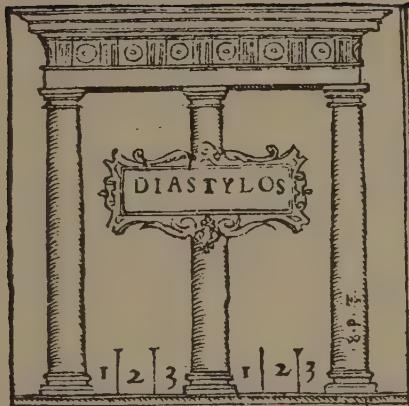
Nowe for somuche as I haue rehersed the beginning and the Institution of this arte of Architecture, naming the writers and authors of the said science, and declared the measures geometrycall thereto belonging in their simetries, with all their garnishementes: it is therfore also requisit to rehersse and to let you understand, by what meanes the order of the before named pillers shalbe altered in their standing, adding, or abating to or fro, every of them accordingly as they shalbe placed, by whiche knowledge or like knowledges may come to the righte perfectio, vpon whiche occasion it shalbe declared what mention Vitruvius doth make in the third boke and second Chapiter & also the opinion of Sebastianus Serlius and other vpon the same, how farand how nere the pillers shalbe set a sunder: Saying that this order of Picnostylos ought thus to be made, that which is the space betwene the 2. pillers shalbe a Diameter and a halfe the piller being in heignt. 10. Diameters. Sistylos is that which bath 2. Diameters betwixt the 2. pillers, whose height shalbe 9. Diameters and a halfe. Diastylos shall thus be made, the pillers shall stand 3. Diameters one from an other, whose height shalbe 8. Diameters and a halfe. Ariostylos is that, which bath the space or bredth betwene the pillers. 4. 5. or. 6. Diameters, and at the furdest. 7. Diameters, the whiche pillers comonly are. 8 Diameters in height: but in the Eustylos the authors differ, the one saith that his measure is like Diastyli, and the other saith that it ought to be like Sistyli, and so because Diastyli is 8. Diameters and a halfe and Sistyli. 9. and a halfe, therfore oure authoure hath made betwene them both an uniformity, and causeth Eustylos to be. 9. Diameters in height. This done Areostyli is. 8. Diameters in height. Diastyli. 8. Diameters and a halfe. Eustylos 9. Diameters. Sistyli. 9 and a halfe, and Picnostyli. 10. Diameters. Nowe like as Tuscan, Dorica, Ionica, Corinthia, & Composita, increase their heightes by Diameters, so do these 5. here before rehersed increase their heightes by Modulus or halfe Diameters, and you shal also garnish & fashion them according to their lengthes, as I haue by their lenght shewed before their similitude and strength, whiche you shall see and perceiue more plainly in the demonstrations followinge.

AREOSTYLOS.

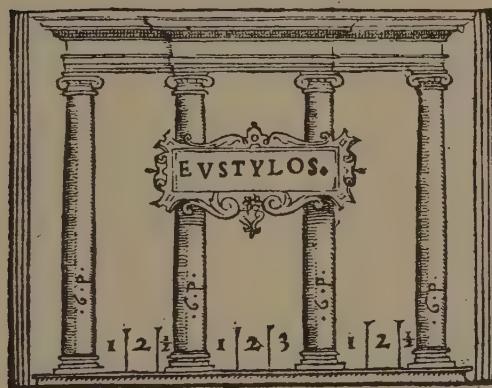
Beginning with this first being Areostylos, as Cesarianus saith, ought to be in height. 8. Diameters, and the distaunce betwene the 2. pillors to be 4. 5. or. 6. Diameters as is before rehersed, whiche piller for his strength is likned or to be sembled vnto Tuscan necessary for all foundations and fortifications both to withstande great forse, & supporte wayghtie burdens, as 5 maister builder can vsse him, which is to be seene in diuers places in Italie, calling it Rusticke or Rughe hewed stone, and in other places to be otherwise garnished.



DIASTYLOS.



He second order as I haue placed it is that whiche Vitruuius calleth *Diastylos*, whose height (saith he) is 8 Diameters and a halfe, and the distaunce betwene the 2. piller's ought to be 3. Diameters or 4. at y furdest, which piller is likned vnto Dorica made to his perfection in the tēple of Mars, which also is a piller to garnishe cyties and gates somewhat pleasaunt and stronge as is to be sene in diuers places, as also gates of pallaces with the vtter galleries.



He third order is that whiche Vitruuius calleth *Eustylos*, the whiche oure Author hath brought to a vniiformity, laying the piller to be in height 9. Diameters, & the distaunce between the 2. pillars to be 2. Diameters & a quarter, as Gulihelme Philander affirmeth, but at the furdest. 2. Diameters and a halfe or 3. which piller is likned vnto Ionica builded to his perfection in the tēple of Diana & Apollo & to be vsed in many meane edifices to be garnished accordinglye.

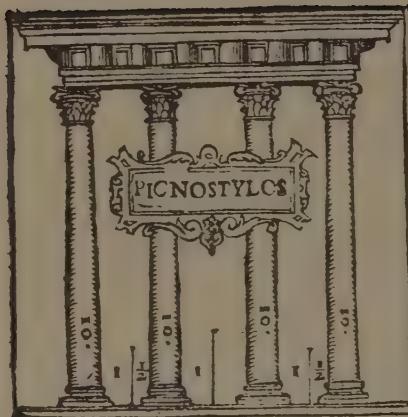
SISTYLOS.



He fourth order is that whiche Vitruuius calleth *Sistylos*, whose height (saith he) is 9. diameters and a halfe, whose pillers standeth distant one from the other. 2. Diameters, or 2. and a halfe at the fourdest and after this maner it was made in the temple of Fortune, which piller is likned vnto Corinthia, whose measures are slender & serueth to garnish princes pallaces and for diuers other thinges necessarye whiche multitude nedeth not to be rehersed, but as time shall serue they maye be practised and brought in vse to diuers vses most necessarye.

The chiefe Groundes

PIC NOSTYLUS.



He first & last order is that which Vitruvius calleth Picnostenlos whose height saith he is.10 Diameters whose pillars standeth distant frō eche other a Diameter, & a halfe or 2. at y fur dest, & thus was it made in the temple of Venus which pillar is semblid or to be compared vnto Composita having in it the full beawtie of al the forsaide measures and garnishments, for al excellent artificers, beawtifully to set furth whether it be in golde or siluer or other riche stone or fine woodes in marketrey or imbosinge or caruing as shalbe thoug ht pleasant & necessary for noble & mighty prīces or for diuers other estates loners of excellency or coninge.

AN OTHER RYLE GEVEN BY VITRVIVS for these three orders of pillers Dorica, Ionica, Corinthia, to be vſed as folowith.

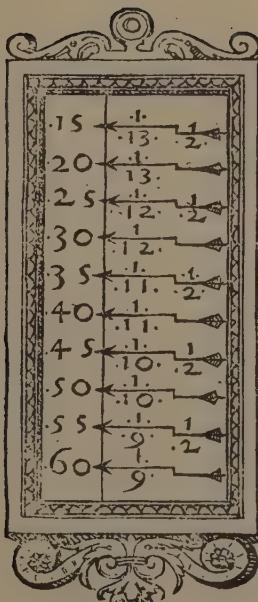
Now if you will begin with the order of Dorica, you shall deuide his height with the Base and Capitall into. 15. partes, one of those partes shalbe the height of the Base and as muche vnto the height of the Capital, whiche shalbe the Modulus of the worke. If it shalbe the order of Ionica, you shalbe deuide the height of Scapus, with the Base and Capitall into. 8. partes and a halfe, and one of those partes shalbe the Diameter of the whole worke, whose Base shalbe a Modulus in height, his Capital shalbe as before is rehersed in Ionica. also if you will make an order of Corinthia, ye shall make it as I haue now rehersed of this laste piller, sauing onely that in the stede of the Capitall of Ionica, ye shall set the Capitall of Corinthia, whiche is a dyameter in height. Now ye shall vnderstand that Vitruvius doth not will Dorica, Ionica, and Corinthia, to stande one vpon an other but he willetteth the Edifice to be all of Dorica, or els all of Ionica, or all of Corinthia, and they to stande one vpon another, alwayd minishinge, so that the higher they stand, the lesser or sklenderer they muste be, for as he saith, a tree is no where so greate, as at the ground, and so groweth smaller and smaller vpwardes vnto the toppe. like wyse, he willetteth the lowest pillor to be strongest made vpon the measure, as before is sayd, and the second pillor, that standeth ouer him, both in height and bredthe shalbe diminishe his fourthe parte. And his Architraue, frese or Cornish shalbe in heighth the fiueth parte of the height of that piller, and so settinge the one vpon the other, diminisheing after thi sayde order. Some of the antiques aforesaid haue obserued these orders and measures, as Sebastianus, doth witnessse in his third boke and fourth Capiter that there are many edifices of the antiques wherin all the orders of these pillers haue bene sette one vpon an other, garnishing them accordinglye as it is yet to be sene in the Amphitiatrum named Colloseum in Rome whose excellent and praise worthy doing shalbe more plainlye sette forth hereafter.

HERE IS AN OTHER NECESSARIE

Rule appointed of Vitruvius for the diminishing of
Scapus, vnder the Capitall by the increasing
of his height.

foote	feet	Scapus	pars
15	6	5	
20	6 $\frac{1}{2}$	5 $\frac{1}{2}$	
30	7	6	
40	7 $\frac{1}{2}$	6 $\frac{1}{2}$	
50	8	7	
60	8 $\frac{1}{2}$	7 $\frac{1}{2}$	
70	9	8	
80	9 $\frac{1}{2}$	8 $\frac{1}{2}$	
90	10	9	
100	10 $\frac{1}{2}$	9 $\frac{1}{2}$	
110	11	10	

Vitruvius, in his third booke and thir d Chapiter, saith thus if Scapus amounte in heigthe from 15. foote vnto 20. the Diameter is to be deuided into 6. partes & a halfe, & þ thicknes of the pillor vnder the Capitall, shalbe 5. and a halfe. And if Scapus, Amounte from 20. vnto 30. foote then shall the Diameter be deuided into 7. partes, wherof 6. partes shalbe the thicknes of the pillor vnder the Capitall and so augmenting and diminishing after this order vntill Scapus, if it were possible, shoulde amounte to the number of 110. foote whiche is the ende of this table that standeth here beside wherin ye maye perceiue in every 10. foote increasinge in height doth shew the thicknes of Scapus vnder the Capitall, so that the 110. foote in height of Scapus, the Diameter to be deuided into 11. partes, then shalbe the thicknes of Scapus, vnder the Capitall. 10. of those 11. partes, & so furth if nede shall require.

AN OTHER EXAMPL E TO BE
obserued very necessary for the maister builder or Architecte
that is for the intlarging of the Epistilium, when the
pillor amounteth to certaine heights.

Vitruvius in the latter ende of his tird booke declaring when the piller that is to saye Base Scapus, and Capitall amounteth from 15. foote to 20. foote in height, then shall the height of the wholie pillor be deuided into 13. partes, on such a part shalbe the height of the Epistilium, also if the pillor do increase from 20. to 25. foote then shall the pillor be deuided into 12. partes and a halfe wherof the height of the Epistilium shall occupie one such part, also if the pillor surmount fr̄ 25. to 30. the height of the pillor must be deuided into 12. partes wherof the height of the Epistilium, shall occupie one such part & so forth as the colume increaseth in height so increaseth the height of Epistilium, as in this table is euidently discussed the encreasing from 15. to 60. foote increased by 5. at ones the whiche pillor of 60. foote in height shalbe deuided into 9. partes, where of the Epistilium occupieth for his height one such part, and so passing forward as necessarie shall requyre in order as is before mencioned.

E.y.

Ther be

The chiefe Groundes

Therbe also diuers other orders of measures and example that the Antiques alwayes vſed in their times, which shoulde be to tedious for the hcarer, and to long for the Reader, hauing no figures out of the whiche springeth both desire and also encouragment to the ſame. Thus ending this treatie of the Introduction and measures of theſe for ſayd pillars, whiche are the original first grounds and entring into this noble ſcience of Architecture, practiſed and allowed by right mighty and worthye potentates, and Emperours for perpetuall memorye of their victorius and triumphant feates, the Elegance therof, of all antiquitie hath bene and yet preſentely is as a parfaicte example and a myrroure to behold, leue and take trewe meaſures, as well to all ſuche, as a delight in durable Edifices and buildinges, as alſo to all noble parfonages and Architectures, whiche do or ſhall take pleauſure to erecte & builde the like to any beawte and perfeccion accordyng to the deuine and myndes of the for ſaid Authours Vitruuus, and Sebaſtianus Serlius, to whom vndoubtedly, the praife and comendation is chiefly to be attriбуited and geu n. I ſubmyt my trauel, vnto aliother that in any parte be or ſhalbe of more parfaict & deeper learninge, knowledge and expeſence, and of like well wylling affection, wherwithi I do offer this my poore atemptes and ſmal trauailes.

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